Joint Simulation System

Transition Plan

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JSIMS Transition Plan

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1.0 SCOPE

01.1 Scope

This plan provides a seven year perspective of the initial transition from the use of current simulations to the Joint Simulation System (JSIMS) for computer assisted exercises (CAX). Over time, JSIMS will replace the training simulations that comprise the Joint Training Confederation (JTC), Joint Tactical Simulation (JTS), Joint Conflict Model (JCM), and Joint Theater Level Simulation (JTLS). JSIMS will also replace the Joint Conflict and Tactical Simulation (JCATS), the upgraded High Level Architecture (HLA) version of the Portable Space Model (PSM), and the Analysis Mobility Platform (AMP). JCATS is an interim simulation under development that will be HLA compliant at its IOC, 1 Mar 1998. It will incorporate the functionality of JTS and JCM, and fill a gap until JSIMS FOC. The criteria for the replacement of a current simulation is when JSIMS meets or exceeds the capabilities of a given training simulation system. Current DoD simulations may require a waiver or conversion to HLA compliance in accordance with the Undersecretary of Defense for Acquisition and Technology modeling and simulation guidance (see Section 2.4).

This plan functions as a blueprint for the deployment of JSIMS and is designed to maintain training continuity during the retirement of current simulation systems. The plan also provides a decision making process for budgetary support and resource allocation between parallel modeling and simulation programs. Finally, the plan describes the management process associated with deploying JSIMS at the simulation sites. Service model transition with the associated 50 plus domain sites is discussed in the Service annexes. The plan does not treat JSIMS capabilities in detail, as this information is provided in other documentation.

While a final decision has not been made on the site installation order for JSIMS, for purposes of this transition plan, the initial sites will include the Joint Warfighting Center (JWFC); USACOM's Joint Training, Analysis, and Simulation Center (JTASC); Warrior Preparation Center (WPC); and Korean Battle Simulation Center (KBSC). These four are training sites. One additional site, the National Defense University (NDU), will be the first Professional Military Education (PME) institution to receive JSIMS. These initial training sites, less NDU, when certified, may assist other sites to prepare for and receive JSIMS as their resources permit. The resources required to support assistance to other sites has not been fully defined. Later editions of this plan will describe this activity as further insight is gained into the JSIMS program.

The key players in the transition to JSIMS are the user, the developer, the budgeter and the policy maker. The user must drive the transition since training capability is the prime objective, and the user's prime concern must be the soldier, sailor, airman, or Marine's ability to perform in joint and Service operating environments. The developer is faced with substantial technological challenges that must be resolved if the new system is to be built quickly and be immediately effective. The budget community is concerned with impacts on spending and economy in acquisition and may become the throttle for user and developer as resources are expanded or limited for both. Funding considerations may be expanded in follow-on versions of the transition plan. This transition plan outlines a methodology and a blueprint to assist the four initial training sites and NDU in navigating the transition period.

The guiding premise for this document is that site transition from current systems to JSIMS can only occur when a certified site has an accredited version of JSIMS that meets the training requirements established by the CINC or commander responsible for unit readiness. Site certification includes the availability and sufficiency of controller and technical support personnel qualified in the operation and

maintenance of the JSIMS model software, supporting hardware, and site infrastructure needed to conduct a JSIMS CAX. Completion of the certification process includes a JPO supported CAX. JPO personnel will be available at the initial sites to mentor the control and technical personnel as the site conducts the first JSIMS exercise. Specific requirements for each site will determine the timing and scope of its first JSIMS exercise. The site certification process is complete when the site authority declares its personnel and center certified to conduct a JSIMS exercise. Accreditation of JSIMS is a user function and occurs when the user accepts a JSIMS version to replace a current simulation to meet training objectives.

11.2 Transition Concept

The JSIMS transition concept blends JSIMS version testing, initial site fielding, follow-on site fielding, franchising, and transition management with the key organizations employed in the transition process.

- The term franchising is used in this plan to denote the assistance that the initial training sites may be able to render in the standup of JSIMS at other sites.
- The JPO will conduct functional verification on each version and JWFC will conduct validation. The user will accredit the fielded version.
- The Air Force Operational Test and Evaluation Center (AFOTEC) will conduct JSIMS Operational Test and Evaluation (OT&E) at Initial Operating Capability (IOC). The IOC event will be at the JTASC.
- The Joint Program Office (JPO) Deployment Integrated Product Team (DIPT) will assist the five initial sites to complete an initial JSIMS CAX.
- Site certification is complete when site authorities declare site readiness to conduct JSIMS exercises. This means the site is ready to conduct a JSIMS CAX without JPO assistance and, after some confidence-building time, may began to assist other sites to receive JSIMS.
- The JSIMS transition concept envisions sequentially deploying five separate versions of JSIMS from IOC to FOC. Each version will contain increasing functional capability. JWFC will receive JSIMS version 1.0 immediately after IOC at the JTASC. Next, KBSC will receive JSIMS version 1.1. followed by the WPC. NDU, the fifth and last of the initial five sites, will receive JSIMS version 1.3.

The transition concept founded in this flexible transition plan was based on sound projections of JSIMS capability and is supported by a transition management process to handle change. Key changes will be tracked by JWFC, and this plan will be modified as necessary. The Services will deploy JSIMS to selected sites in accordance with Service plans. When signed, this plan becomes JSIMS transition policy.

01.3 JSIMS Transition Plan Revisions

Planning to support the transition from current models to JSIMS will require continued cooperation between the Executive Agents (EAs), Development Agents (DAs), Joint Program Office (JPO), Services, CINCs, and Joint Warfighting Center (JWFC). The necessary criteria for the replacement of a current simulation is when JSIMS meets or exceeds the capabilities of that simulation. The EAs, DAs, JPO, Services, CINCs, and JWFC will manage this replacement through the transition management process described in section 3.5. JSIMS transition planning must continue throughout the transition period. This plan will be reviewed periodically to incorporate needed changes prompted by:

- JSIMS key event challenges (see Figure 5.1 JSIMS Transition Blueprint)
- Site certification challenges (see Figure 5.1 JSIMS Transition Blueprint)
- Delays in deployment milestones (see Figure 4.1 FY Transition Timeline)

- Resource shortfalls (see paragraph 4.5 Model Funding Considerations)

2.0 Background

02.1 JSIMS Program

The Joint Simulation System (JSIMS) program will produce products that create and sustain a simulation environment capable of meeting a broad set of requirements for training, mission rehearsal, and other uses. The primary focus of JSIMS both at Initial Operational Capability (IOC) in December 1999 and Full Operational Capability (FOC) in FY03 will be training. At IOC, initial interactive participation will be through the Global Command and Control System (GCCS), while Services may build additional linkages. As JSIMS moves toward FOC, planned linkages to HLA compliant analytical models, simulators (virtual simulation), more C4I systems, and live participants (actual aircraft, tanks, etc.) will provide a framework for a more robust training, mission planning, and rehearsal capability.

12.2 Plan Goals

The following transition planning goals are established:

- Develop a user endorsed transition planning process
- Integrate JSIMS into the Joint Training System with the least impact on joint training resources and to the greatest advantage of joint and Service audiences
- Provide uninterrupted computer assisted training support for the CINCs during the transition period
- Integrate Service JSIMS transition plans
- Provide a framework for transition tracking and follow-on changes
- Optimize the JSIMS deployment plan
- Finalize the JSIMS transition sites and schedules
- Provide a transition schedule for JSIMS-critical legacy system phase-out
- Provide DoD with the most cost effective transition plan

02.3 Plan Assumptions

The following assumptions support this plan:

- JSIMS will demonstrate FOC by FY 2003 at all five sites
- DoD will resource the transition from legacy and interim models to JSIMS as projected, with legacy and interim models funded in the POM until changeover is complete
- Scheduled joint computer-assisted exercises (CAX) will proceed regardless of JSIMS availability
- JSIMS user sites will provide the necessary infrastructure, support facilities, and operational concept required for transition

02.4 Plan Constraints

Factors that constrain the introduction of JSIMS and the transition from legacy and interim models to JSIMS are:

- Resource limitations will impact schedule and capabilities of the deliveries
- Training and readiness cannot be sacrificed to accommodate transition activities

- Due to time, fiscal, and technological constraints, JSIMS 1.0 will not match full functionality of the FY 1998 JTC at its IOC, in December 1999 (FY00). Nonetheless, JSIMS version 1.0 will have much of the functionality and training benefit of the JTC at IOC that is focused on training joint force commanders (commanders of Unified Commands and prospective joint task force commanders) and staffs, and principal subordinate Service and functional component commanders and staffs in operational and strategic-theater joint tasks.
- Under Secretary of Defense for Acquisition and Technology policy prohibits development and maintenance funding for any defense simulation that does not achieve High Level Architecture (HLA) compliance after 1 October 1998 or use after 1 October 2000. Exceptions are permitted only when waivers are granted.
- The franchising concept addressed in this plan to support the rapid fielding of JSIMS to other than the five initial sites is unfunded.

02.5 JSIMS Management Structure

This plan focuses management on a process that provides continuous user oversight during the transition period. Using the goals of this plan as a framework, the plan uses an events-based review cycle to analyze projected sequencing and deployment of the system. After IOC, the same transition process will support user feedback to update transition activities, further development, and schedule changes. The transition process supports the current JPO development planning and deployment process.

The management structure for JSIMS consists of a Senior Review Board (SRB), a Training Council, and a Functional Working Group (FWG). JSIMS operates under the authority of a DoD and Service agreed structure that identifies and assigns responsibilities, as well as providing for monitoring of user requirements and development of transition activities. Management responsibilities during the JSIMS transition period are outlined as follows:

- **JSIMS Senior Review Board (SRB).** The JSIMS SRB is a senior flag officer body charged with functional oversight of the JSIMS program. As such, it is the final authority for resolving significant JSIMS transition issues.
- **Training Council.** The Training Council for Modeling and Simulation is a flag officer advisory body to the JSIMS SRB and is charged with functional oversight of the JSIMS program. It was established by the Executive Council for Modeling and Simulation. The Training Council is co-chaired by the Deputy Under Secretary of Defense for Readiness and the Joint Staff Director for Operational Plans and Interoperability. It has authority for resolving JSIMS transition issues.
- **Functional Working Group (FWG).** The FWG is an O-6 level working group that functions to screen and resolve routine issues or frame larger issues for presentation to the Training Council. Transition issues may be presented to the FWG for resolution.
- **JWFC.** The Commander, Joint Warfighting Center is the JSIMS program advocate, requirements focal point, and manager of JSIMS core funding. Program advocacy includes serving as: the joint user integrator for both training and analytical requirements, the builder of user requirements prioritization consensus, and the joint user community's voice in senior level DoD, joint and Service meetings. The JSIMS Executive Agent Charter designates the JWFC as the representative responsible for user requirements. In this capacity, the Commander of the JWFC will ensure requirements are collected, prioritized, deconflicted, and shared with the developer. The Commander, JWFC acts as the Joint Staff agent to represent and integrate the requirements of the CINCs, Services, and agencies in the development of JSIMS and ensures JSIMS integration into the Joint Training System. The Commander, JWFC is responsible for the transition plan and monitors transition activities. The Commander, JWFC chairs the JSIMS Requirements Control Board (JRCB) executive session and designates a JWFC representative to chair the JRCB general sessions. The Commander, JWFC will attempt to resolve requirements issues prior to escalation to

higher levels. Also, the Commander, JWFC and the JSIMS Program Manager are jointly responsible for ensuring that JSIMS meets Verification, Validation, and Accreditation (VV&A) requirements.

- **JSIMS PM.** The JSIMS Program Manager (PM) will establish standards for development to ensure EA/DA products are interoperable and in compliance with DoD guidelines. The JSIMS PM is the final decision authority on development issues. The JSIMS PM directs the JSIMS Joint Program Office (JPO) and chairs the JSIMS Configuration Control Board (JCCB).
- **JSIMS JPO.** The JPO, through the I&D contractor, delivers JSIMS to five initial sites. The Deployment Integrated Product Team (DIPT) is the lead IPT for transition for the JPO. The DIPT is responsible for coordinating planning and preparation, installation, and initial site certification at each of the sites selected to receive JSIMS. The DIPT will work closely with each DA and assist with site installation integration tasks. The specific functions of the I&D contractor are to install the software, provide training materials, and train a cadre of personnel at the five initial sites. Additionally, the JPO supports technical issues and provides software support as required. The JPO oversees the JSIMS software development process, as well as continuing to assist users with technical integration during the transition phase.

3.0 Transition Process

03.1 Transition to IOC

The transition process leading to IOC is the shared responsibility of JWFC, JPO, EAs, DAs, and the JTASC. Figure 3.1 is a general overview of the process leading to IOC at the JTASC, which has been selected as the operational test site. The JWFC publishes the transition plan identifying the test site and supports Verification, Validation and Accreditation (VV&A) and Operational Test and Evaluation (OT&E). JWFC manages transition during this period to ensure that the legacy phase-out schedule can be accomplished. The Deployment IPT (DIPT), supported by the I&D contractor, is responsible for planning and preparation, installation, and site certification at the JTASC. The JTASC, as the initial test site, is responsible for providing and installing computer systems and model hardware. JTASC will coordinate and assist JWFC and the JPO in establishing and maintaining facility configuration for testing activities. JWFC will work with the JTASC JSIMS Integration Team (JIT) to ensure a successful JSIMS OT&E.

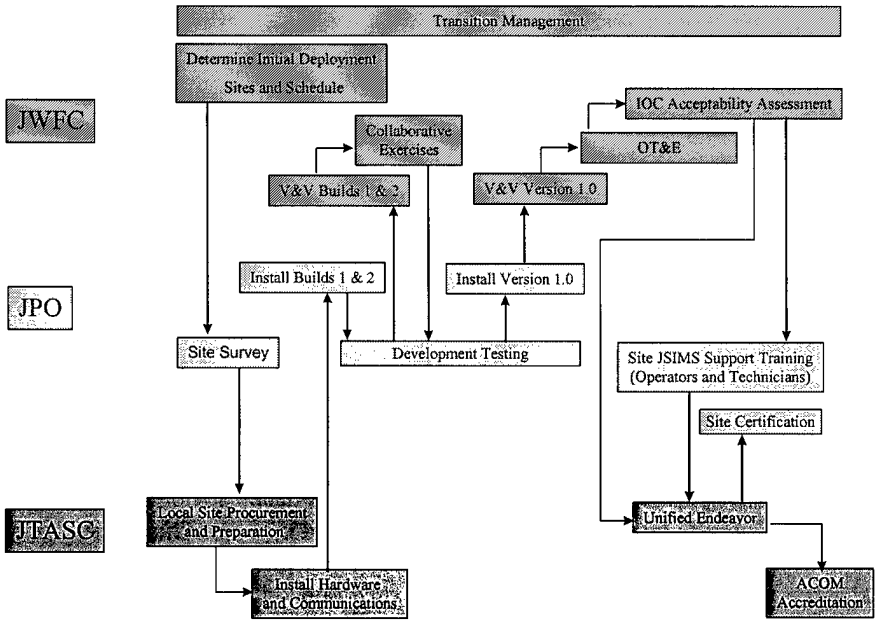

Figure 3.1 - JSIMS Transition To IOC

13.2 Transition to FOC

The transition period from IOC to FOC continues to be a shared responsibility of many members of the modeling and simulation community. Figure 3.2 is a general overview of the relationships between the key transition process steps leading to FOC. Transition management activity takes on increased importance as JSIMS is deployed to more sites. JWFC's transition management is supported within the existing requirements management structure outlined in Figure 3.3. Transition management functions are represented in the JSIMS Requirements Control Board (JRCB) Actions' block seen in Figure 3.2.

This block represents both transition management actions and JSIMS user requirement advocacy actions. JWFC supports the transition process with continued evaluation of the initial deployment sites and monitors the deployment schedule to ensure the phase-out schedule can be accomplished. Verification and validation and OT&E activities managed by JWFC continue to support each new installation. The JPO/DIPT and the remaining four sites initiate activities to support transition to JSIMS. Development testing of follow-on versions is an on-going action by the JPO and its contractors. The receiving sites plan for receipt of JSIMS to include personnel training and preparing to support the initial JSIMS computer-assisted exercise (CAX). Users will ultimately accredit JSIMS for site purposes and, at that time, legacy and interim model systems will be phased-out.

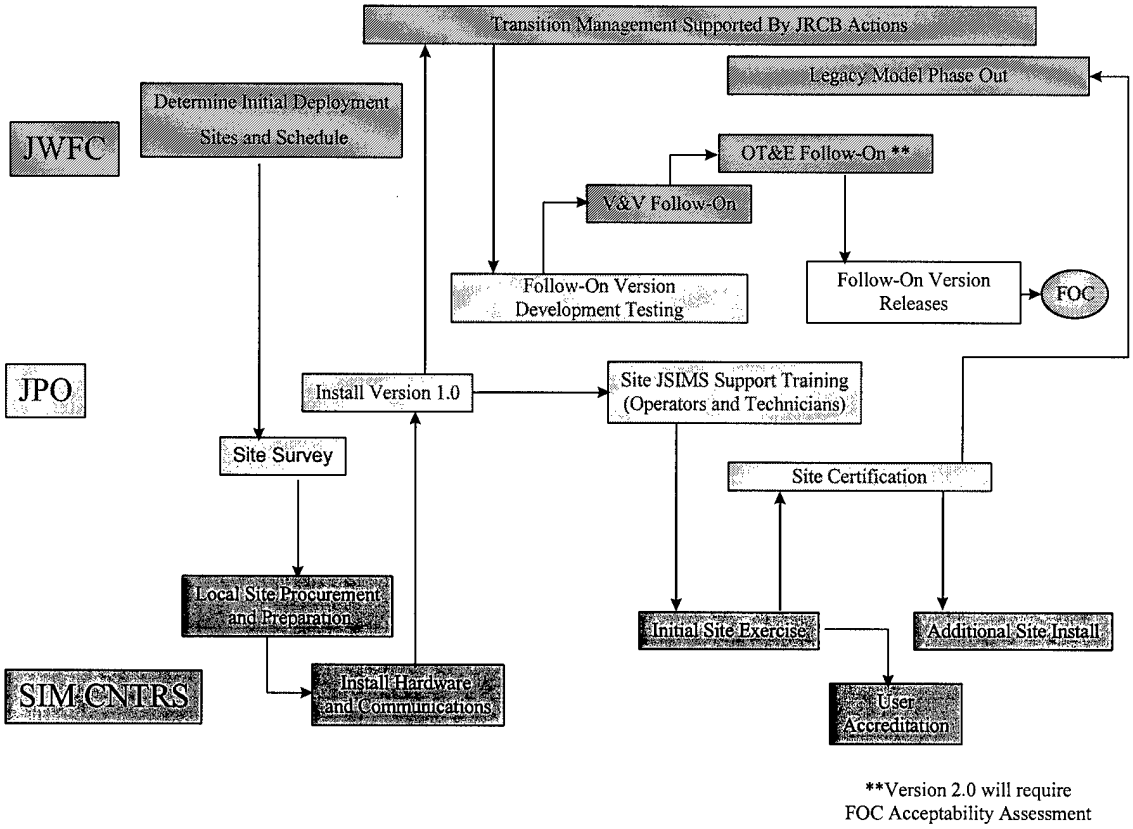

Figure 3.2 - JSIMS Transition To FOC

23.3 JRCB and JCCB Process

In addition to transition management, within the established JSIMS Configuration Control Board (JCCB) and JSIMS Requirements Control Board (JRCB) requirements management process, the JWFC will employ the same bodies and processes for JSIMS model management after the system matures. A brief overview of the JRCB and JCCB process, Figure 3.3, is presented here as background material. Further discussion of these boards can be found in the Enterprise Management Plan, the Configuration Management Plan, and Requirements Control Board Management Plan for JSIMS.

JWFC is tasked with collecting and reconciling EA requirements for insertion into the development process. As noted in figure 3.3, the JRCB is JWFC's vehicle to collect and focus user functional requirements and discrepancy reports against specific training and VV&A requirements. This board articulates user-derived JSIMS product changes and enhancements as they arise. JWFC's Advanced Simulations Division Chief chairs the general sessions of the JRCB on behalf of the JWFC Commander.

The Board's membership includes Joint and Service EAs, CINC representatives, J7, and the JWFC. The Commander, JWFC will appoint a chair of an executive council of this body composed of joint and Service EAs only.

Figure 3.3 also portrays the relationship to the JCCB. The JSIMS Program Manager chairs the JCCB. Technical developers and DAs constitute the board's membership. The JCCB reviews proposed changes and discrepancy reports for technical feasibility, cost, scheduling, and system impacts associated with proposed changes. The JCCB is primarily concerned with the technical development of JSIMS and configuration management between the various developmental agents.

The JRCB will review all Requests for Change (RFCs) and Discrepancy Reports (DRs) that affect user requirements, and the JCCB will review all technical DRs. The boards may direct that an Investigative Report (IR) be done to confirm or bound a problem. The JRCB may request a technical review and an impact statement from the JCCB. The JRCB will then prioritize user needs and submit that list to the Executive Council for review. The Council finalizes the prioritization of JSIMS system changes to be incorporated predicated upon user benefits along with fiscal and time constraints. The council approves the list, and JWFC monitors the implementation of changes. These approved changes then provide justification in the form of updates to the Operational Requirements Document (ORD), Concept of Operations (CONOPS), and Transition Plan as required. Requests for updates, changes, and deficiencies will be made and collected via forms available on the JPO's JSIMS web site. The primary difference in objectives between the JRCB and the JCCB is the focus of activity for each. The JCCB is focused on the on going build, the interactions of the different domains, and the effects on the next build. The JRCB takes a systems perspective and normally will focus on the current status of the existing builds and what changes are required one build cycle out. The JRCB is always checking current status; however, its focus is visionary and concerned with the future of JSIMS.

As JWFC manages transition and later model management through the JRCB. User requirement issues may arise that require the JRCB and JCCB to resolve interactively the challenge at hand. The resolution of those issues then passes from the JRCB to JPO and then to the development contractors for implementation.

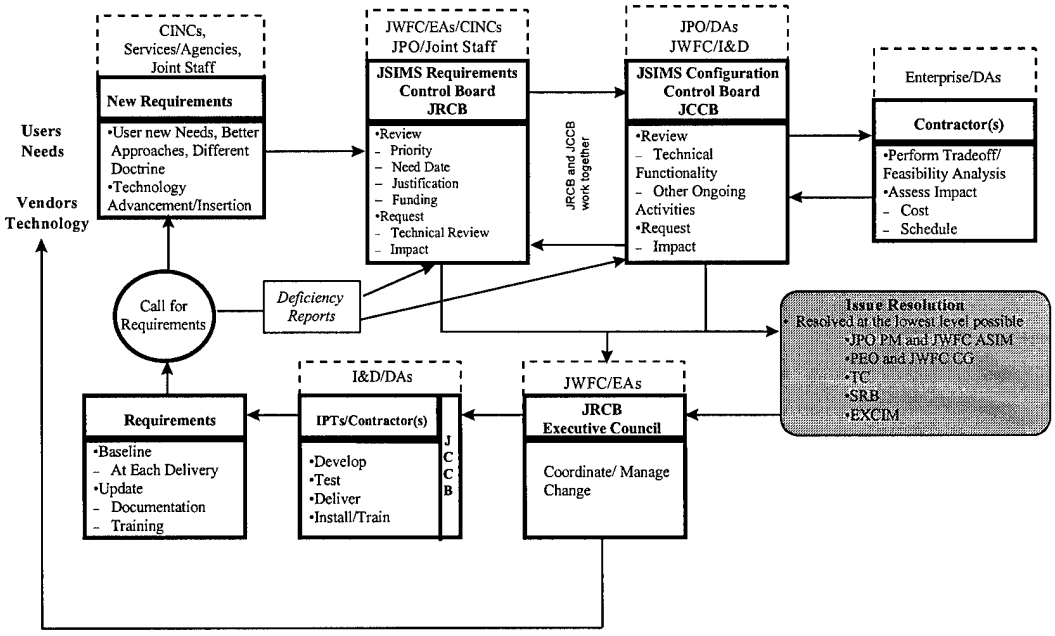

Figure 3.3 - JRCB and JCCB Process

33.4 The JRCB and JCCB as Issue Resolution Bodies

The JRCB and the JCCB work closely together to provide a prioritized menu of changes to the Chairman of the JRCB. Issue resolution between the JRCB and the JCCB will normally be accomplished at the working group level. Funding impacts of issues will be addressed. User needs will be supported but balanced against developer's critical path, impact on the deployment schedule, and funding. In the event of differences between the two boards, an executive session consisting of JWFC's Advanced Simulations Division Chief and the JSIMS Program Manager meet to resolve contentious issues or decide to elevate the issues to an executive session between the Commander of JWFC and the JSIMS Program Executive Officer (PEO), who is the next higher management position in the developmental community senior to the JSIMS Program Manager. If certain remaining issues require higher authority to resolve, those issues are taken to the training council, which is co-chaired by the Deputy Under Secretary of Defense for Readiness and the Director, JCS J7. The highest level of issue resolution is the Senior Review Board (SRB), a three star equivalent board. (The TC and the SRB are not shown in Figure 3.3.)

43.5 JRCB and JCCB Performing Transition Management

Transition management tasks are part of the user requirements prioritization mission of the JRCB at the outset of the program. As transition management tasks decline, model management tasks will have fully matured.

Many of the transition and requirements management tasks are very similar; however, specific objectives and outcomes will be different. Transition tasks include: planning and adjusting the VV&A/OT&E schedule (see Figure 5.1 JSIMS Transition Blueprint), rescheduling or modifying accreditation CAXs, and monitoring JSIMS transition vis-à-vis the planned phase-in and legacy/interim system phase-out, planning and executing plans to expand the franchising of JSIMS to additional sites, and re-prioritization of JSIMS deployment based upon site readiness or operational requirements. Budget and POM funding support are also critical transition tracking tasks.

The JRCB and the JCCB will facilitate transition by responding to training and technical queries from new JSIMS sites and users. The boards will archive important documents as well as capture and distribute lessons learned. The DIPT will keep both control boards updated on the status of JSIMS deployment. The board process will assist the CINCs in making decisions to use legacy/interim systems or JSIMS to support upcoming exercises.

The JWFC will monitor and track transition events for the JRCB by using critical scheduling data fields of the JPO Integrated Master Schedule (IMS) along with other JSIMS and Service system sources. JWFC's monitoring will couple that data to budget and policy information in order to provide early identification of transition critical path issues. Eventually, JWFC will use a computerized support software to manage and update relevant JSIMS policy, budget, and event tracking data elements.

53.6 Simulation Support Site Planning

The simulation support site and its resource sponsor, in conjunction with the DIPT, must plan for the receipt of JSIMS. The site must procure and install any necessary hardware and supporting software. In order to achieve CINC user acceptance of JSIMS, each of the initial JSIMS sites will conduct an initial JSIMS CAX, during which the site can accredit a specific version of JSIMS for use.

Each simulation center should work with associated programs (e.g., NASM, WARSIM, etc.) on specific procurement and funding issues. Services should plan for JSIMS distribution to associated simulation sites, estimated to be in excess of 50. Some actions in the transition to FOC (such as site surveys) will occur simultaneously with steps in the process leading to IOC.

63.7 JSIMS Transition Planning Review Cycle

Transition planning requires an event-based, periodic review cycle embedded within the requirements control process to maintain continuous oversight of the program. The transition planning review cycle interval will be determined by changing requirements. However, at least one periodic review cycle will occur inside the development, testing, and deployment cycle for each of the JSIMS versions (i.e., 1.0, 1.1, 1.2, 1.3, 2.0). The predominate focus of the review will be to aid the successful development, testing, and deployment of a subsequent version of JSIMS. As an example, the review cycle following version 1.0 is targeted at changes required in versions 1.2 and follow-on versions. The cycle is initiated by the JWFC's issuing a call for new requirements from the CINCs and Services. From those inputs recommendations will be compiled on JSIMS functional priorities. New capabilities and improved functionality will be based on an assessment of training requirements.

4.0 Legacy Models Transition to JSIMS

74.1 Legacy Models Functionality

Today, no single simulation or combination of models provides a comprehensive representation of the joint operational environment. Each of the Services has independent systems that support Service-specific or function-specific needs, but are not capable of portraying the full range of military operations, such as an adequate replication of Military Operations Other Than War (MOOTW). Current existing simulation systems are not fully compatible with existing C4I systems, nor are they High Level Architecture (HLA) compliant. One short term Joint Training Confederation (JTC) capability improvement under development is the design of an Aggregate Level Simulation Protocol (ALSP) and HLA interface adapter; called the ADAPTOR. It will be tested in CY 1998. If successful, this ALSP/HLA ADAPTOR will allow legacy systems to participate in HLA-based federations until replaced be JSIMS.

The initial version of JSIMS will be able to support a JTF exercise and simulate aggregate representations of ground forces, platform representations of air and sea assets, and the interactions between them. It will also simulate basic employment, operate at close-to-real time, and may require human-in-the-loop participation by a portion of the simulation audience. A significant portion of the JTC FY 98 functionality will be available at IOC. As each new version of JSIMS is deployed, greater detail is incorporated in the program until full functionality is achieved at FOC. Since each new version of JSIMS will meet or exceed certain legacy capability, phase-out recommendations for each legacy system based on increasing JSIMS capability will be identified in this transition plan.

84.2 Legacy Transition Pace Determined by JSIMS Functionality

When JSIMS functionality matches or exceeds CINC training requirements, it will replace legacy systems. The Fiscal Year Transition Timeline (Figure 4.1) illustrates the most optimistic transition timelines based on a functionality analysis. The horizontal axis represents time in fiscal years and the four bars graphically display the transition of current systems to JSIMS.

The upper bar in Figure 4.1 depicts the Portable Space Model (PSM), which embodies the space functionality that will not be available in JSIMS until FOC. The second bar represents the scheduled replacement of the current Joint Conflict Model and Joint Tactical Simulation by the Joint Conflict and Tactical Simulation (JCATS). JCATS, which provides the same training functions as the models it is replacing, is also capable of other functionalities, such as urban warfare operations. JSIMS will replace JCATS at FOC sometime late in 2003, when JSIMS will be capable of performing all of the JCATS functions.

The third bar represents the JTC phase-out. JSIMS will have most of the functionality and training benefit of the FY 1998 JTC at IOC in December 1999–(FY00). The initial JSIMS IOC functionality is focused on training joint force commanders (commanders of unified commands and prospective joint task force commanders) and staffs, and principal subordinate Service and functional component commanders and staffs in operational and strategic-theater joint tasks. The PSM, Joint Theater Level Simulation (JTLS), and Analysis Mobility Platform model suite (AMP) can be used in the interim as alternative models when complex strategic tasks are not supported by the current version of JSIMS and the functionality of those models is critical to achieving certain training objectives. It is anticipated that, as each JSIMS version is delivered, more JTC/JTLS capability will be achieved so that the JTC can be phased-out in the first quarter of FY02 as shown on Figure 4.1.

The lower bar illustrates the recommended transition from JTLS to JSIMS. Currently JSIMS (Version 1.1) will not develop full capability to exercise NBC, information, amphibious, special, and space operations by FY 2001. JTLS support is projected until the end of FY01. An extension of JTLS for the

first two quarters of FY 2002 is required to cover this capability gap. The deployment of JSIMS version 1.2 will overcome much of the shortfall. This plan reflects the phase-out of JTLS in the second quarter of FY02.

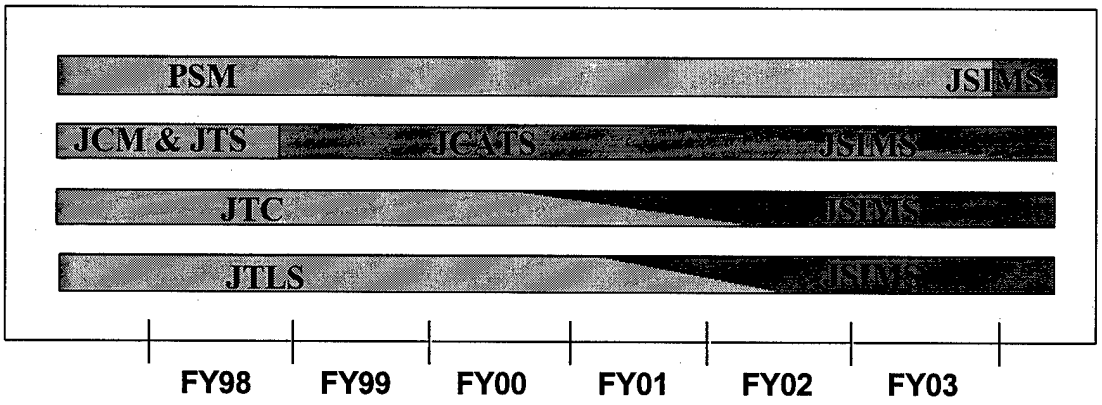

Figure 4.1 - FY Transition Timeline

94.3 Initial Five Deployment Sites

JSIMS will deploy to the five initial sites identified in paragraph 1.1. The sites identified are the JTASC for testing and follow-on employment; JWFC as the joint control site and follow-on employment; WPC and KBSC for employment; and finally, NDU for educational employment. These sites currently conduct the preponderance of all JTF level training using JTC or JTLS. JSIMS, therefore, must be able to satisfy the joint legacy system CAX workload by the end of the transition period in FY03.

104.4 Projected CAX Load Capacity

The CINCs' Computer Assisted Exercise (CAX) history was used as a measure of future JSIMS CAX requirements. Only eleven major Joint Task Force (JTF) CAXs are planned for FY98. There is no indication of legacy systems being required to accommodate more than eleven major JTF CAXs per FY in the years after FY98. However, the data clearly indicated that the four operational simulation centers chosen by this transition plan will continue to conduct the majority of JTF exercises.

As JSIMS matures the simulation centers will find more uses for the model. JSIMS anticipated capabilities, coupled with economic savings and increasing model employment opportunities, indicate growth in the future. That growth is being driven by a need to move bytes, rather than people, favoring the growth of JSIMS CAX beyond current levels. Sizing this future workload required a joint CAX load projection. Projections were made for each site based on growth potential and requirements. Figure 4.2 graphically displays the projected joint CAX requirements for the four initial training sites.

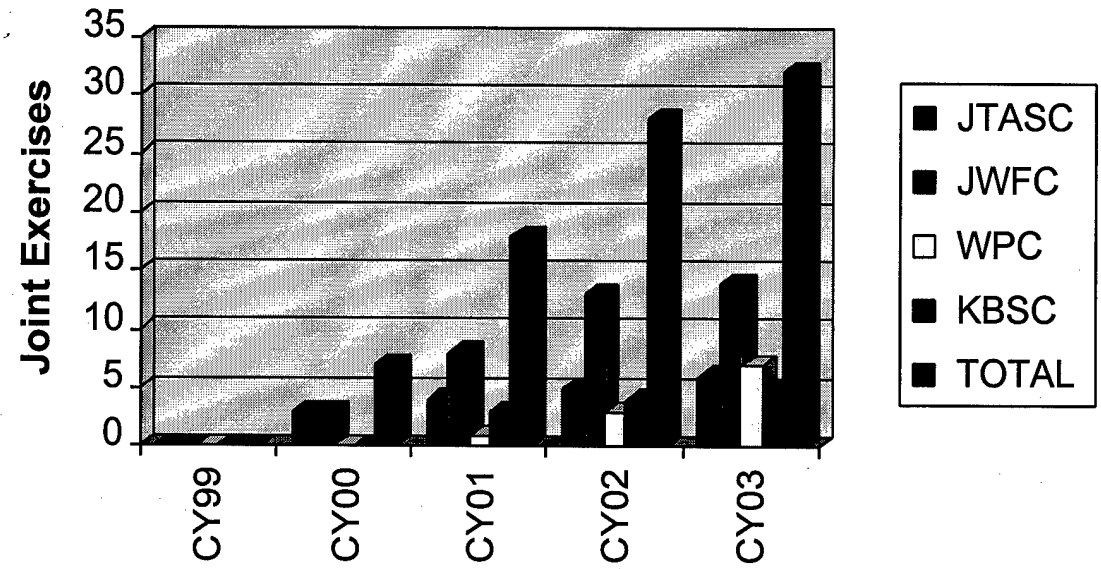

Figure 4.2 Projected JSIMS CAX Exercise Load By Site

Currently, the maximum CAX load per year for all types of exercises is about 24, but should grow to 32-35 per year by 2003. It is anticipated that more FTX exercises will transition to JSIMS CAXs. It is further anticipated that additional internal JTF staff training CAXs can be expected and that analytical uses of JSIMS will increase the demand for JSIMS. With the exception of the KBSC site, there is expected growth in JSIMS capacity beyond current legacy levels during the transition period. At KBSC, growth in JSIMS employment occurs in the years following the transition period.

JTASC currently plans to support four JTF CAXs in CY98. After site certification, JSIMS supported CAX capacity is anticipated to match the CY98 norm of four CAXs per year in CY01. With increased JSIMS efficiency, it is anticipated that JTASC will be able to support an additional CAX per year through CY03, reaching an equivalent of six CAXs per year.

The JWFC supports ten major and two minor CAXs per year. This level is anticipated to continue with JSIMS until savings in personnel and funding are achieved, allowing additional CAX support. It is currently projected that the JWFC should be able to attain a sustained CAX capacity of 14 per year in CY03, given productivity savings generated by JSIMS.

The WPC conducts up to ten exercises a year but, historically, only four have been JTF CAXs. The WPC will be able to conduct one JSIMS CAX in CY01 and should grow to three in CY02. Additional productivity gains add four CAXs per year by the end of the transition period.

KBSC has historically supported a maximum of five JTF CAXs per year. KBSC supports three CAXs in CY01 and reaches its former legacy norm of five JTF CAXs per year in CY03. Additional growth is anticipated in the years after the transition period.

114.5 Model Funding Considerations

Funding considerations are critical to JSIMS transition. Service model funding considerations, when available, will be located in the individual Service annexes. JTS and JCM funding will end in the second quarter of FY97. JCATS IOC is 1 March 1998, and all JTS and JCM users will receive JCATS tapes that month. Funding for JCATS will end when JSIMS reaches FOC. The JTC will continue to be required past JSIMS IOC until the deployment is complete to the four initial training sites. Funding for JTC is now programmed through the end of FY99. Currently funding for JTLS is scheduled to expire at the end of FY 2001. JSIMS (Version 1.1) will not develop full capability to exercise NBC,

information, amphibious, special, and space operations by FY 2001. An extension of funding for the first quarter of FY 02 for JTC and for the first two quarters of FY 2002 for JTLS is required to cover this capability gap. As noted in paragraph 4.2, JSIMS (Version 1.2), fielded in the first quarter FY02, may fill much of the functionality gap. PSM funding is not programmed beyond FY99. Continued PSM funding will be required. Detailed budgeting and program requirements for transition will be identified in later versions of the transition plan for the initial and subsequent sites as they are developed.

When compared to the requirement for legacy system availability, three model funding issues are already evident:

- JTC funding is required through the first quarter FY02 for all Services
- JTLS funding is required for the first two quarters of FY02 for JWFC
- PSM funding support for an HLA-compatible space model is required through FOC

04.6 Upgrade and Retirement Schedules for Services/Agencies

JSIMS is a single simulation system that will be composed and configured to meet Joint and Service requirements. JSIMS development is comprised of efforts from several acquisition programs to include JSIMS Maritime, National Air & Space Model (NASM), National Simulation (NATSIM), and Warfighters' Simulation 2000 (WARSIM 2000). As JSIMS is deployed, the legacy systems supporting Service requirements will be phased out by the Services. The following sub-paragraphs comprise the individual Service inputs to this Transition Plan.

4.6.1 Air Force (See also Annex C)

The USAF plans to replace the AFSOM (Air Force Suite of Models), including AWSIM, with the National Air and Space Model (NASM) late in FY99 until all current users of the AFSOM have JSIMS installed and operating. The AFSOM will need to be maintained until JSIMS is installed, tested, and ready for training at each beddown location. When this is completed, USAF legacy models can be retired. The USAF anticipates transition to JSIMS to be completed in CY03, when the last site using the JTC transitions to JSIMS. Further information on Air Force Transition is contained at Annex C.

4.6.2 Army (See also Annex D)

The Army plans to transition from the legacy simulations CBS, TACSIM, and CSSTSS to WARSIM 2000 at the WARSIM IOC in FY00 to its FOC in FY03. WARSIM 2000 hardware and full software functionality will be complete in FY 04. Phase-out timing of the legacy systems is dependent upon achieving like functionality in WARSIM 2000. The Army has many simulation sites and has produced a phase-in schedule for WARSIM 2000 at Annex D. JSIMS will not be used to meet the Army's Title X mission responsibilities. Further information on Army Transition is contained at Annex D.

4.6.3 Marine Corps (See also Annex E)

The Marine Corps plans to use JSIMS initially to replace its MAGTF Tactical Warfare Simulation (MTWS). At JSIMS FOC the Marine Corps will replace the Joint Conflict And Tactical Simulation (currently the Joint Tactical Simulation is used). In order to begin transition from MTWS to JSIMS two key assumptions have to be met:

- MTWS functional capabilities are replicated by the version of JSIMS at transition
- JSIMS hardware requirements are met by either the future MTWS hardware or new acquisition

Further information on Marine Corps Transition is contained at Annex E.

4.6.4 Navy (See also Annex F)

The Navy will field JSIMS for Navy use to support the Navy Training Continuum. Navy users will cover the continuum of training from platform level (Category I), to Joint Task Force Level (Category III), to strategic level. JSIMS will serve a wide range of training audiences and support training in tactical to strategic level warfare tasks. The concept for transition to JSIMS is to provide a system which more effectively and efficiently meets user requirements, deliver JSIMS to Navy and Joint users in a timely manner, and replace legacy M&S systems. Further information on Navy Transition is contained at Annex F.

05.1 Transition Schedule

The transition blueprint is shown in Figure 5.1. This blueprint deploys JSIMS as early as practical to support joint training requirements and will be updated as the situation changes.

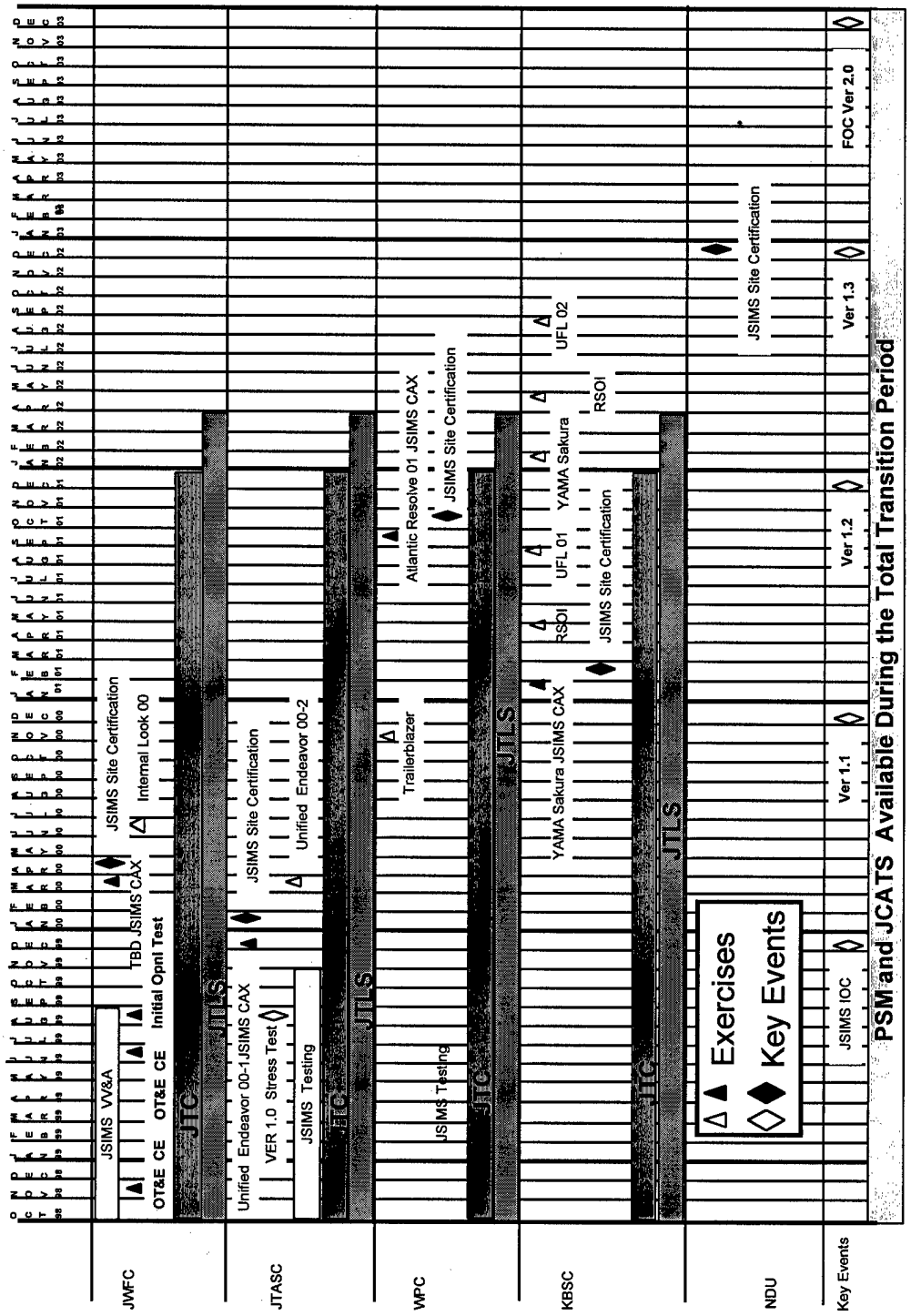

Figure 5.1 JSIMS Transition Blueprint

15.2 Initial Transition Decision Points

To ensure timely decisions supporting an efficient transition to JSIMS, a series of decision points will be identified and updated on a regular basis. This will enable JWFC and Joint Program Office (JPO) Deployment Integrated Process Team (DIPT) to anticipate critical decision junctures. Decision points will be identified based on the developers' Integrated Master Schedule (IMS), the build plan, POM process, and other key program budget decision points. Policy decision changes, such as HLA compliance, legacy system extensions, or shifts in training focus, are also critical. Initial decision points identified to date:

- Sep/Oct 97 -- Pre-JROC/JROC to approve CONOPS, ORD, and Transition Plan
- Sep 97 -- JPMR to receive Enterprise Build and JPO Work Allocation Plans
- Jan 98 -- ALSP Review Panel decision on future of ALSP
- Apr 99 -- Pre-release version 1.0 -- Beta version -- for testing

05.3 Site Transition

Table 5.1 delineates the proposed initial JSIMS exercises at the four training sites. (NDU will not have a large scale exercise upon receipt of JSIMS, so it is not included in Table 5.1) The initial sites are scheduled for certification support in the form of personnel training from the Integration and Development (I&D) contractor. The I&D contractor, in support of the DIPT, will provide initial site certification support as described earlier. Sites retain on-going responsibility for JSIMS certification at site simulation facilities. CINCs and commanders are responsible for accrediting JSIMS for their training requirements. JWFC, JPO, DIPT, and I&D contractor will provide advisory assistance to other CINCs, Services, or Agency sites when required to support certification. Direct certification support may require site sponsor funding at these other sites.

Site	Exercise	Date
JTASC	UE 00-1	Dec 99
JWFC	TBD	CY00 Q1
WPC	Atlantic Resolve	CY01 Q4
KBSC	Yama Sakura	CY01 Q1

Table 5.1 - Proposed Initial JSIMS Exercises

05.4 Deployment Support

The JPO, through the DIPT, is responsible for deploying JSIMS to the initial five sites. The first two deployment sites will be the JTASC and the JWFC. These sites will work together, as they are geographically located in the same area and can take advantage of the synergism between them to support Verification, Validation and Accreditation (VV&A), Operational Test and Evaluation (OT&E), and transition. Deploying JSIMS at both sites provides a backup and a more robust test environment. JWFC requires JSIMS to be resident at JWFC to support the OT&E mission. Near simultaneous deployment of the system at both sites is critical to transitioning from current systems to JSIMS.

As JWFC and JTASC work together to support and test the system, extensive hands-on experience with JSIMS will be developed. By the time the system reaches IOC, most initial expertise will reside in the two centers. JWFC will have acquired the capability to support franchising of JSIMS to additional locations. Franchising is facilitating start-up of an initial tier of sites that will assist other sites within their mutual resources and geographic areas to transition to JSIMS. JTASC may also be able to assist other sites. At IOC, training support packages will have been built by the I&D contractor and made available from the JPO. The I&D contractor will provide both initial cadre training and a follow-on " train-the-trainer" package to each of the five initial sites.

15.5 Role Considerations by Site

The transition plan envisions each initial site with specific roles as JSIMS is deployed.

5.5.1 JWFC

As the program advocate, the JWFC accepts the model and manages the program on behalf of DoD and the user community. JWFC responsibilities include supporting validation, testing, accreditation, and model deployment at each site for all joint users. To provide JWFC personnel with the needed familiarization and capability to meet its responsibilities JSIMS should be installed at JWFC as soon after installation at JTASC as is feasible, but not later than one build behind.

JWFC provides updates to the user for version changes concerning employment options to support exercise requirements. JWFC supports the JPO in deployment operations and may be called upon to deploy personnel, hardware, and software for site initial training and certification when operationally required. This support would be within JWFC's traditional support to the joint community.

JWFC will assist users of each version of JSIMS with problems encountered through scenario modifications, certification for a specific exercise type, or general user operational problems. This may entail helping the user adapt workarounds for specific requirements or employment architectures using other supporting simulations. JWFC also supports documentation requests and reviews exercise plans, JSIMS system training plans, and certification documents related to operational issues. Technical software and hardware integration challenges will be referred to the JPO I&D contractor for assistance. JWFC will employ franchising as a site startup supporting strategy, when and where it is feasible to do so.

5.5.2 JTASC

JTASC is the initial JSIMS operational test site. The JPO may conduct development and integration tests at the JTASC. JTASC personnel may supplement the JPO for testing and evaluation. JTASC will complete site certification using JSIMS version 1.0 by December 99. Subsequently, the JTASC will employ JSIMS as the CONUS-based categories 2 and 3 force trainer.

5.5.3 WPC

WPC is the initial European site. After site certification, WPC will employ JSIMS in conducting joint and multi-Service exercises. When JSIMS has matured, it is envisioned that WPC may be able to support the franchising of JSIMS to smaller simulation sites within Europe as the European Support Site, if adequate funding becomes available. Although WPC facilities will not be part of the early VV&A process, WPC and KBSC personnel may very well be involved. Site certification is anticipated in October 2001.

5.5.4 KBSC/KASC

Korean Battle Simulation Center/Korean Air Simulation Center (KBSC/KASC) is the initial Pacific site. The acronym KBSC used in this document has been simplified to mean KBSC/KASC. The intent is for the KBSC and KASC to be treated as one center and bedded down/trained together in all instances. Subsequent to certification, KBSC will employ JSIMS to conduct joint, single, and multi-Service exercises. When JSIMS has matured, it is envisioned that KBSC may be able to support franchising JSIMS to smaller simulation sites in the Pacific as the Pacific Support Site if adequate funding becomes available. KBSC will not be part of the early VV&A process. Site certification is anticipated in February 2001.

5.5.5 NDU

NDU is the initial educational site to receive JSIMS. Its role is to teach senior officers aspects of conducting joint operations and enable NDU's staff and student body to conduct research and analysis of operational level issues. As the Army, Navy, and Air Force deploy JSIMS to their respective Service schools, NDU will provide educational insight into the use of JSIMS. Students at these schools will be exposed to JSIMS, making them more comfortable with the system in the field. As they rotate to CINC staffs, they will be at ease in using JSIMS. NDU is not part of the early VV&A process or IOC deployment. JSIMS will be deployed at NDU with version 1.3, in December 2002, when sufficient JSIMS blue and opposing force components can be automated, thereby reducing the need for component support personnel.

25.6 JSIMS

The most effective way to balance the requirements of the developer, the budget, the policy-maker and, most importantly, the user is to deploy the system as rapidly as possible. If the system is not deployed the user cannot accrue any value until the out years.

A guiding premise for this document was that transition from current systems to JSIMS can only occur when a certified site has an accredited version of JSIMS that meets the training requirements of the CINC or commander responsible for unit readiness. JSIMS at IOC should be able to meet that test. Integrating JSIMS with the Joint Training System as early as possible in its life cycle will reduce the current strain on joint training resources and provide the greatest advantage to joint and Service audiences. Rapid deployment of JSIMS maximizes training impact by getting all the critical sites up and running and significantly shortens the timeline for legacy systems. With more sites using the system, greater insight will be achieved sooner on technical and operational issues. Budget and policy constraints are much more achievable.

This transition plan has provided a framework for continuous transition tracking and follow-on support. Transition planning will be an ongoing process until the system reaches FOC.

Annex A References

3A.1 Foundation Documents

The references below provide the framework for the retirement of specific legacy systems. These systems include the Joint Training Confederation (JTC), the Joint Theater Level Simulation (JTLS), and the conversion of the Joint Tactical Simulation (JTS) and the Joint Conflict Model (JCM) to the Joint Conflict and Tactical Simulation (JCATS). The Operational Requirements Document (ORD) supports the Mission Needs Statement(MNS) for JSIMS and defines JSIMS requirements at a level of detail meaningful to both the JSIMS development community and the expected users of the system. The Functional Requirements Document (FRD) supports the ORD.

Requirements

JROCSM 080-94, 20 July 1994

JSIMS Mission Needs Statement (MNS), 22 July 1994

JSIMS Operational Requirements Document (ORD), Version 2.8, 27 August 1997

JSIMS Functional Requirements Document (FRD), 20 November 1996

JSIMS Concept of Operations (CONOPS), Version 1.0, 15 August 1997

JSIMS Verification, Validation and Accreditation Strategy, Working Draft Version 2.1, 13 August 1997

Management

IPR Brief, CAPT Beasley, JSIMS Program Manager, 24 Apr 97

JSIMS Executive Agent Charter, Draft Version, 28 Jul 1997

Joint MOA for the Joint Simulation System, 13 December 1996 [MOA applies to those elements of the Office of the Secretary of Defense (OSD), the Services and the Chairman of the Joint Chiefs of Staff, participating in the development and deployment of JSIMS (...referred to collectively as "the JSIMS Partners")]

Meeting Record Memorandum, DoD Training Council For Modeling and Simulation, Co-Chairs Mr. Finch, DUSD(R) and MG Close, Joint Staff, Director, J7, 30 Jul 1997.

MOA between the Joint Warfare System (JWARS) Office and the JSIMS Joint Program Office, 18 December 1996

MOA between the Joint Warfighting Center and The JSIMS Joint Program Office, 17 March 1997

General

Joint Doctrine Capstone and Keystone Primer

Joint Training Policy for the Armed Forces of the United States, Chairman of the Joint Chiefs of Staff Instruction (CJSCI) 3500.01

Joint Training Master Plan 1998, CJSCI 3500.02

Joint Training Manual, Chairman Joint Chiefs of Staff Manual (CJSCM) 3500.03, 1 Jun 1996

Universal Joint Task List, CJSCM 3500.04A Version 3.0, 13 Sep 1996

Joint After Action Review Reporting System, Joint Pub 1-03.30

JSIMS Sequencing Brief, 11 February 1997

JSIMS Integrated Master Plan

JSIMS Integrated Master Schedule

Aggregate Level Simulation Protocol (ALSP) 1997 Confederation Test Report, 21 April 1997

Summary of 23 Jan 97 Joint Modeling and Simulation Executive Panel -- High Level Architecture Working Sub-panel Meeting, J8 Memo, 28 January 97

Annex B Acronyms and Glossary

4B.1 Acronyms

ACOM	Atlantic Command
AFOTEC	Air Force Operational Test and Evaluation Center
AFSAF	Air Force Semi-Automated Forces
ALSP	Aggregate Level Simulation Protocol
AMP	Analysis Mobility Platform model suite
AWSIM	Air Warfare Simulation
CAX	Computer-Assisted Exercise
CBS	Corps Battle Simulation
CCB	Configuration Control Board
CE	Collaborative Exercise
CINC	Commander In Chief
CJCSI	Chairman of the Joint Chiefs of Staff Instruction
CJCSM	Chairman Joint Chiefs of Staff Manual
CONOPS	Concept of Operations
CSSTSS	Combat Service Support Training Simulation System
CT	Confederation Test
DA	Development Agents
DIPT	Deployment Integrated Product Team
DoD	Department of Defense
DR	Discrepancy Reports
EA	Executive Agent
FOC	Full Operational Capability
FRD	Functional Requirements Document
FWG	Functional Working Group
GCCS	Global Command and Control System
HLA	High Level Architecture
I&D	Integration and Development
IMS	Integrated Master Schedule
IOC	Initial Operational Capability
IPT	Integrated Product Team
IR	Investigative Report
IMS	Integrated Master Schedule
JCAS	Joint C2 Attack Simulation
JCATS	Joint Conflict and Tactical Simulation
JCM	Joint Conflict Model
JECEWSI	Joint Electronic Command Electronic Warfare Simulation
JPMR	Joint Program Management Review
JPO	Joint Program Office
JROC	Joint Requirements Oversight Council
JSIMS	Joint Simulation System
JTASC	Joint Training, Analysis, and Simulation Center
JTC	Joint Training Confederation
JTF	Joint Task Force
JTLS	Joint Theater Level Simulation
JTS	Joint Tactical Simulation

JWARS	Joint Warfare System
JWFC	Joint Warfighting Center
KBSC	Korean Battle Simulation Center
LAD	Logistics Anchor Desk
MNS	Mission Needs Statement
MOA	Memorandum of Agreement
MOOTW	Military Operations Other Than War
MTWS	Marine Air Ground Task Force Tactical Warfare Simulation
NASM	National Air & Space Model
NATSIM	National Simulation
NDU	National Defense University
ORD	Operational Requirements Document
OT&E	Operational Test and Evaluation
PSM	Portable Space Model
RESA	Research Evaluation And Systems Analysis Simulation
RFC	Requests for Change
RSOI	Reception, Staging, Onward Movement, & Integration
SRB	Senior Review Board
TACSIM	Tactical Simulation
TC	Training Council
TPRB	Technical Performance Review Board
TRC	Transition Review Cycle
TRD	Technical Requirements Document
UE	Unified Endeavor
UFL	Ulchi Focus Lens
UJTL	Universal Joint Task List
V&V	Verification and Validation
VV&A	Verification, Validation, and Accreditation
WARSIM 2000	Warfighters' Simulation 2000
WPC	Warrior Preparation Center

0B.2 Glossary

Accreditation	Accreditation is user acceptance of the model for specific exercises.
Categories 1, 2, and 3	Categories from the Joint Training , CJCSM 3500.03, 1 Jun 96. Category 1: Service Training (US Only) Category 2: Component Interoperability Training (US Only) Category 3: Joint Training (US Only)
Certified Site	Site certification includes the availability and sufficiency of controller and technical support personnel qualified in the operation and maintenance of the JSIMS model software, supporting hardware, and site infrastructure needed to conduct a JSIMS CAX.
High Level Architecture (HLA)	Major functional elements, interfaces, and design rules, pertaining as feasible to all DoD simulation applications, and providing a common framework within which specific system architectures can be defined.
Interim Simulations	Simulations that precede JSIMS in development and deployment that are HLA compliant.
Legacy Simulations	Simulations that are not HLA compliant. These simulations were

developed in the past and are still in use with interface modifications to extend their usefulness and interoperability with other simulations.

Annex C Air Force JSIMS Transition Plan

01.0 Air Force JSIMS Transition Plan Overview

The USAF currently uses the Air Force Suite of Models (AFSOM), which includes the Air Warfare Simulation (AWSIM) and associated peripheral models, to conduct both Joint and Service CAXs. The Warrior Preparation Center (WPC), Korean Air Simulation Center (KASC), and Air Force Wargaming Institute (AFWI) use the AFSOM linked to the Joint Training Confederation of Models via the Aggregate Level Simulation Protocol (ALSP). The USAF Battlestaff Training School (BTS) uses the AFSOM linked to BTS-developed models and virtual simulators via the Distributed Interactive Simulation (DIS) protocols to train the Joint Force Air Component Commander and Joint Air Operations Center. The Air Force intends to use JSIMS to support training at all echelons from the theater commander down to the wing level to include staff training activities and educational wargames. JSIMS will also be used to support formulation, assessment and evaluation of operational plans, development and evaluation of doctrine and tactics, and Operational Test and Evaluation.

12.0 Assumptions

JSIMS will meet the IOC/FOC requirements as stated in the JSIMS Operational Requirements Document.

- JSIMS IOC capabilities will be fielded in FY00. FOC capabilities will be fielded in FY04
- Adequate training on JSIMS will be provided to each training center
- Sufficient JSIMS/NASM funding will be available to meet AF performance requirements and projected schedule timelines

03.0 Constraints

Constraints include exercise schedules at each simulation center and availability of the NASM contractor to install JSIMS, ability of JSIMS to provide adequate training capabilities, and funding availability for each simulation center's hardware.

- Each simulation center must have the available downtime for installation of JSIMS and training of initial cadre personnel. Beddown will be done incrementally to allow for JSIMS hardware installation, testing, training, and exercise shadowing.
- The Air Force will not replace current training systems at WPC, KASC, or AFWI until JSIMS can provide training capabilities equal to those of the FY98 JTC. BTS transition will not occur until JSIMS provides the training capabilities equal to those used to support a FY98 Blue Flag exercise. JSIMS hardware at each of the simulation centers is currently an unfunded requirement. USAF will update their FY00 POM submission to obtain the funds necessary to meet this requirement.

04.0 Legacy System Phase-Out

The AFSOM will need to be maintained until JSIMS is installed, tested, and ready for training at each beddown location. When this is accomplished, USAF legacy models can be retired. The USAF anticipates this to be CY02/03, when the last initial joint training site using the JTC transitions to JSIMS.

15.0 Fielding Site Identification and Phase-In

The USAF will use JSIMS at the USAF Battlestaff Training School (BTS), Warrior Preparation Center (WPC), Korean Air Simulation Center (KASC), and the Air Force Wargaming Institute (AFWI). Beddown will be incremental to allow for hardware and software installation, testing, training, and exercise shadowing. Table C.5 shows the USAF's transition schedule from the AFSOM to JSIMS first-use dates at each simulation center.

SITE	LEGACY SYSTEMS	YEAR
WPC and KASC	AFSOM Linked to JTC via ALSP	CY01-CY02
BTS	AFSOM Linked to BTS-Developed Models and Virtual Simulators via DIS Protocols	CY02
AFWI	AFSOM Linked to JTC via ALSP	CY03

Table C.5 USAF Site Phase-In/Phase-out

06.0 Critical Decision Milestone Chart including Legacy Phase-Out

Critical Decision Milestones are defined by the JSIMS and NASM development schedules. JSIMS IOC is scheduled for FY00. The USAF anticipates using JSIMS at WPC and KASC in 2001. This will allow necessary installation, testing, training, and exercise shadowing. Legacy-system phase-out is anticipated to be in 2002 when BTS begins using JSIMS.

17.0 Key Test and Exercises

Testing will be done in accordance with JSIMS and NASM development schedules and simulation center availability.

28.0 Phase-In at IOC and FOC

Phase-in at IOC through FOC will be done in accordance with the procedures already described. Phase-in of new builds will require the necessary hardware and software installation, testing, training, and exercise shadowing prior to replacing the previous build. This will ensure simulation center personnel are fully trained on any new capabilities, and that the new build can fully support an exercise.

Annex D Army JSIMS Transition Plan

31.0 Army JSIMS Transition Plan Overview

WARSIM 2000 is a computer-based simulation and associated hardware designed to support the Army training requirements of unit commanders and their staffs from battalion through theater level as well as to support training events in educational institutions. Users of the simulation will train under the control and supervision of a senior trainer, usually the commander of the highest echelon command represented in the training audience, the next higher level commander, or an instructor within the Army schools and academies.

This plan is in response to request from JWFC to provide service transition planning input to the JSIMS Transition Plan 1.0. The following paragraphs define basic assumptions and premises and provides instructions and information relative to the transition from using CBS, TACSIM, and CSSTSS to WARSIM 2000.

42.0 Assumptions.

- The Army will not field equipment for JSIMS. The WARSIM 2000 program will field equipment for Army Title X training only.
- The Army retains responsibility and authority for approved WARSIM 2000 sites although Joint training may be conducted at these sites. Army WARSIM 2000 sites are not considered JSIMS sites.
- The initial complement of WARSIM 2000 hardware and Build 1 software will be established for Early User Interaction (EUI) facilities at the NSC and III Corps BSC in FY 98.
- WARSIM 2000 software builds 2 and 3 will occur in FY 99-00. WARSIM 2000 will provide to JSIMS the Mission Space Objects (MSO) supporting a "first use" capability for Joint training in Unified Endeavor Exercise 00 (UE-00)
- Training for WARSIM 2000 operators, maintainers and users will be provided by the contractor IAW the WARSIM 2000 IOC schedule, at this time beginning in FY 99.
- Integrated Logistical Support (ILS) including Contract Logistics Support (CLS) and Post Deployment Software Support (PDSS) for all WARSIM 2000 sites will be accomplished through "turn key" support from STRICOM funded through the WARSIM 2000 Program. The WARSIM 2000 Program will not fund any JSIMS ILS and support.

53.0 Constraints

None.

64.0 Legacy System Phase-Out.

CBS, TACSIM and CSSTSS are the Army's representative systems to the Joint Training Confederation (JTC) that will be replaced by WARSIM 2000. While these systems provide a good training environment for Corps and Division training, shortcomings in the systems have resulted in the requirement for a replacement of these systems with a new simulation system, WARSIM 2000, which is now under development. Phase out of legacy systems will occur as the functionality of those systems are implemented in WARSIM 2000.

Fielded Devices Team, Army Training Support Center (ATSC), TRADOC, will be responsible for providing disposition instructions to all major commands (MACOM) regarding all equipment replaced by WARSIM 2000. Possible uses for the displaced equipment may include backfill for shortages in BBS and CBS, to supplement Life Cycle Support (LCS) programs, provide for active and reserve component unfunded requirements, or, in support of other Army or other service requirements. Final disposition alternatives will be decided upon when better funding and other program requirements are available.

76.0 Critical Decision Milestone Chart

Critical Decision Milestone Chart. (TBD by STRICOM, NSC)

87.0 Fielding Site Identification and Phase In.

Current plans call for three (3) Regional Training Centers (RTC) capable of supporting corps and division level exercises. The CONUS based RTC will be at the NSC, Ft. Leavenworth, KS. Two other RTC will be established, one in Germany and the other in Korea. In addition to the three (3) RTC sites, there will be WARSIM 2000 suites fielded to numerous Army Battle Simulation Centers (BSC) where concentrations of brigades and battalions reside, Reserve Component Battle Projection Centers (BPC) , the field Combat Training Centers (CTC) and army service schools. These systems will be specifically configured to meet the training requirements of each site. Figures D-7.0.1through D-7.0.5 identify currently proposed WARSIM 2000 sites.

98.0 Phase-In at IOC and FOC

WARSIM 2000 IOC, scheduled for FY 00, will be the level of functionality of CBS Version 1.5.4, plus line of sight (ground and air), multi-functional logistics units (e.g., Forward Support Company), task organization of logistics units, explicit convoys, automated After Action Review (AAR) system, linkages to selected Army Battle Command Systems (ABCS), automated scenario generation tool, enhanced graphical user interface (GUI), and improved terrain representation. Also to be achieved in the IOC version will be that portion of the WARSIM Intelligence Model (WIM) requirement that provides for the replacement of the Battle Command Training Program (BCTP) Intelligence Model (BICM).

The delivered suite of IOC software and hardware will be capable of supporting a multiple-echelon corps/division level CPX. The system will first be installed at the National Simulation Center (NSC) with sufficient workstations and communications interface software and equipment delivered and installed at Fort Hood, TX and Fort Carson, CO to support a "full up" corps/division level field command post exercise (CPX).

FOC will be accomplished in a phased development and fielding strategy IAW the approved WARSIM 2000 Basis of Issue (BOI) that in addition to the initial site at Ft. Leavenworth, establishes the RTC for Germany and Korea and provides sufficient hardware throughout other Army installations to support home station training for corps and division exercises.

Fielding to the Total Army will be accomplished by FY03 with each site receiving a WARSIM 2000 hardware system that is sized and scaled to meet the unit training requirements for that site.

The fielding of simulation software will also be a phased development that will continue after IOC, leading to a complete CBS, WIM/TACSIM and CSSTSS functionality, stand alone Brigade/Battalion capability, cognitive processing capabilities to achieve automated units, increased levels of resolution of functional models and complete linkages to ABCS to include voice I/O capabilities by FY 04.

WARSIM 2000 SITES	FY98	FY99	FY00	FY01	FY02	FY03	FY04
Regional Training Centers (RTC)							
CONUS NSC Ft. Leavenworth, KS (BCTP/CGSC/35th NGB LDC/VVA Program/CONUS C/D Exercise Spt/PDSS)	VVA (i*) (Build 1)	VVA (Build 2)	C/D (i*) (IOC)		C/D (i*)	C/D B/B (i*)	
OCONUS (V*)							

Figure D-7.0.1 Fielding Schedule/Phase In – Regional Training Centers.

CONUS AC BSC's	FY98	FY99	FY00	FY01	FY02	FY03	FY04
III Corps, Ft. Hood, TX HQ III Corps; 1CAV (HQ 3 Bde's); 4INF (HQ,2 Bde's) Ft. Carson, CO: 3BDE, 4ID; 3 ACR	VVA (Build1)	VVA (Build 2)	B/B B/B				
XVIII ABN Corps Ft. Bragg, NC HQ XVIII ABN Corps 82 DIV(HQ,3 Bde's) Ft. Stewart, GA 3ID(HQ,2 Bde's) Ft. Campbell, KY 101 AAA DIV (HQ,3 Bde's) Ft. Drum, NY 10ID (HQ,2 Bde's) Ft. Richardson, AK 1BDE,6ID (1 Bde)				B/B B/B B/B B/B B/B			
I Corps Ft. Lewis, WA HQ ICORPS 3BDE, 2ID 1BDE, 25ID Schofield Barracks, HI 25 DIV (HQ,2 Bde's)				B/B B/B			

Figure D-7.0.2 Fielding Schedule/Phase In -- CONUS AC BSC's (including Hawaii)

Schools	FY98	FY99	FY00	FY01	FY02	FY03	FY04
Ft. Rucker, AL AV School						SCH	
Ft. Knox, KY AR School						SCH	
Ft. Sill, OK FA School						SCH	
Ft. Benning, GA IN School 3BDE,3ID						SCH	
Ft. Bliss, TX AD School SGM Acad						SCH	
Ft. Leonard Wood, MO EN/CM/MP Schools						SCH	
Ft. Huachuca, AZ INTEL School						SCH	
Ft. Gordon, GA SIGNAL School						SCH	
APG, MD ORD School						SCH	
Ft. Jackson, SC AG/Finance/Chaplain Schools						SCH	
Ft. Lee, VA QM/TR Schools						SCH	
Ft. Sam Houston, TX MED SVS School						SCH	
Ft. Bragg, NC Civil Aff/JFK Center						SCH	

Figure D-7.0.3 Fielding Schedule/Phase In -- Schools

CONUS CTC	FY98	FY99	FY00	FY01	FY02	FY03	FYO4
Ft. Irwin, CA NTC						B/B	
Ft. Polk, LA JRTC						B/B	

Figure D-7.0.4 Fielding Schedule/Phase In CONUS Combat Training Centers

NGB/RC Tng Centers & Exercise Units	FY98	FY99	FY00	FY01	FY02	FY03	FYO4
Ft. McCoy, WI USAR BSNCOC						B/B	
Houston, TX 75th ID(E) BPC						B/B	
Ft. Dix, NJ 78th ID(E) BPC						B/B	
Arlington Hights, VA 85th ID(E) BPC						B/B	
Birmingham, AL 87th ID(E) BPC						B/B	
Camp Parks, CA 91st ID(E) BPC						B/B	

Figure D-7.0.5 Fielding Schedule/Phase In NGB/RC Training Centers & Exercise Units

8.1 Figure Notes apply to all Figures D-7.0.1 through D-7.0.5

i--Equipment suites to support Validation, Verification and Accreditation (VVA), early user interaction and continuous Developmental Testing/Operational Testing (DT/OT), are fielded to NSC, Ft. Leavenworth, and III Corps Battle Simulation Center (BSC), Ft. Hood in FY98-99.

ii--Corps/Division (C/D) exercise support capability fielded in FY00-01 at the RTC sites. Brigade/Battalion (B/B) equipment (workstations and communications package) are to be fielded at Active Component (AC) unit BSC sites to support distributed home station training capability.

iii--Additional C/D capabilities may be needed at Ft. Leavenworth to provide simultaneous exercise support to meet scheduling requirements of CONUS based units.

iv--Battle simulation software for independent "stand alone" B/B exercise support is scheduled for fielding in late FY02. AC unit BSC B/B sites fielded with equipment in FY00-01 to support C/D exercises will be retrofitted with B/B software in FY02. The remaining B/B sites and school configurations are to be fielded in FY03. The size and scope of B/B and school sites will be dependent on training requirements for each site.

v--Sites in Europe and Korea will be considered to support US Army Europe and 8th US Army responsibilities after the fielding plans for JSIMS are understood so as to not be duplicative and ensure training support to Army units in meeting Title X mission responsibilities overseas.

Annex E Marine Corps JSIMS Transition Plan

01.0 Marine Corps JSIMS Transition Plan Overview

The Marine Corps plans to use JSIMS initially to replace its MAGTF Tactical Warfare Simulation (MTWS) and by JSIMS FOC the Joint Conflict and Tactical Simulation (currently the Joint Tactical Simulation fills the role that the Joint Conflict and Tactical Simulation will take). In order to begin transition from MTWS to JSIMS two key assumptions have to be met:

12.0 Assumptions

- MTWS functional capabilities are replicated by the version of JSIMS at transition
- JSIMS hardware requirements are met by either the future MTWS hardware or new acquisition

23.0 Constraints

In order to meet the first assumption, JSIMS must meet or exceed MTWS capabilities in all the following areas: ground combat, aviation , logistics, amphibious operations, C4I interfaces, and combat support. Determination of whether JSIMS meets these criteria will take place in the venue of a MAGTF Staff Training Program (MSTP) Phase 3 exercise. MSTP will be the final decision authority as to whether JSIMS can replace MTWS for training. A Phase 3 exercise is the portion of MSTPs training program wherein a constructive simulation is used to support training for a Marine Expeditionary Force (MEF).

In order to meet the second assumption, either JSIMS must run on MTWS hardware that exists when JSIMS is delivered (the preferred solution) or new hardware must be purchased to support JSIMS. The Marine Corps has programmed in the POM for hardware purchases with the understanding that JSIMS would be able to run on a variety of hardware to include the TAC4 and TAC 5 family of Navy and Marine Corps computers and Operating Systems.

34.0 Fielding Site Identification and Phase-In

When transition to JSIMS begins, Marine Corps sites will be the same as the current MTWS sites. Fielding at these sites will be in the following tentative order: Quantico (MSTP), Camp Lejeune, NC (II MEF simulation center), Camp Pendleton , CA. (I MEF simulation center), Camp Hansen, Okinawa (III MEF simulation center), 29 Palms Ca. (Marine Corps Air Ground Combat Center simulation center). Test and maintenance sites may be established at I MEF and the Marine Corps Test Software Support Activity, Camp Pendleton Ca. Additionally, Marine Forces Pacific, Camp Smith, Hawaii will receive JSIMS hardware and software sometime after initial Marine Corps fielding has taken place.

The initial fielding to MSTP in Quantico will take place once it can be reasonably foreseen that JSIMS will match or exceed MTWS capabilities. This will probably be nine months to a year before the fielding takes place. Once this decision point has been reached, planning for the additional MEF sites can begin. From initial fielding, at Quantico, to completion of fielding at the first five sites is expected to take about a year to a year and a half. MSTP will evaluate JSIMS capability in a phase 3 exercise before fielding is begun for any other site. Once a JSIMS successfully completes a Phase 3 evaluation, other Marine Corps sites fielding will begin.

45.0 Legacy System Phase-Out

Transition from JCATS to JSIMS will take place along much the same lines as the transition from MTWS to JSIMS. The focus of capability will be the JCATS capabilities in high resolution modeling (individual/platform, urban terrain, MOUT, MOOTW). By JSIMS FOC the Marine Corps expects to use JSIMS aboard ship to support Marine Expeditionary Unit (Special Operations Capable) training, mission planning, and mission rehearsal. A lesser included case of this will be shore based support of training for small units. This will include interoperability with aircraft, combat vehicle, and individual simulators as well as range instrumentation systems for both ground and air. By interoperable JSIMS is expected to provide the simulation environment for these simulators and instrumentation systems. An important aspect of shipboard operation is the requirement to run a high resolution and fidelity exercise on a smaller number of computers than in a MEF simulation center. The type of scenario for shipboard use is nominally a Lesser Regional Conflict size or smaller.

56.0 Funding

The Marine Corps has ceased funding for Research and Development for MTWS. Post Deployment Software Support for MTWS is planned currently through 2002. Beginning in FY 98 the Marine Corps Development Agent Coordinator will begin receiving Marine Corps R&D funds for JSIMS. The level of funding is expected to be adequate for Marine Corps unique requirements.

67.0 Fielding and Funding Adequacy Issues

The following are issues that the Marine Corps has identified that have a potential to seriously interfere with the tentative fielding and also impact on the adequacy of funding. Issue 1, 2, and 6 have a direct impact on the ability of JSIMS to replace MTWS. Issues 3, 4, 5 are directly related to the timing of the transition to JSIMS at Quantico and other MEF sites. Issue 7 relates directly to the ability of JSIMS to replace JCATS. These issues are:

1. Lack of support for amphibious operations in the land domain of JSIMS until circa 2004. This is a fundamental mismatch between the Marine Corps and Navy aim to replace at JSIMS IOC MTWS/RESA respectively and the WARSIM 2000 direction to support Army only training.
2. Exact amount of hardware required to run a Phase 3 exercise (Ulchi Focus Lens/Unified Endeavor)
3. When will JSIMS software be released by the JPO
4. Time, location, and amount of training for JSIMS operators
5. Mismatch between Joint site fielding for CINCs and Marine Corps requirement to support multiple CINCs. Implies need to maintain JSIMS and MTWS at certain sites until all CINC are using JSIMS.
6. JSIMS IOC functional capability shortfall from original Joint Training Confederation requirement. Implies need to maintain MTWS longer than expected with attendant costs to the Marine Corps.
7. Afloat support for training, mission planning, and rehearsal in an environment characterized by urban areas, MOOTW, small unit operations, and littoral environments .

Annex F Navy JSIMS Transition Plan (JSIMS Maritime Program)

01.0 Introduction

1.1 Scope

The objective of the Navy JSIMS Transition Plan is to provide for transition to and field JSIMS for Naval use, and to establish a deployment timeline. While focusing on Navy specific responsibilities, this plan supplements the Joint Warfighting Center's JSIMS Transition Plan which addresses joint sites and the transition of three simulation systems, the Joint Training Confederation (JTC), Joint Theater Level System (JTLS), and Joint Conflict and Tactical Simulation (JCATS), to the single, distributed, seamlessly integrated, composable, Joint Simulation System (JSIMS).

The Navy plan will be coordinated with and leverage the fielding of JSIMS at the five joint sites; USACOM Joint Training, Analysis and Simulation Center (JTASC), Joint Warfighting Center (JWFC), Warrior Preparation Center (WPC), Korean Battle Simulation Center (KBSC), and National Defense University (NDU) to support Navy fielding of JSIMS. The plan incorporates the concept the first four sites being certified to assist others to prepare, receive and initially use JSIMS. The transition plan will be updated periodically to incorporate changes which may occur regarding JSIMS introduction to Joint, Navy and other service sites.

This plan will support users, developers and managers involved in the development and fielding JSIMS for Navy and Joint users. Navy users are fully integrated into the development and fielding process, and play a central role in determining transition sites, priorities and the deployment timeline.

The guiding premise for this document is that transition from legacy systems to JSIMS will occur when a certified and accredited site has an accredited version of JSIMS which meets the training requirements of the CINC or commander responsible for unit readiness. A certified site is defined as one that has JSIMS installed and the training necessary to certify personnel in the operation and maintenance of the modeling tool. Accreditation is user acceptance of the model for specific types of exercise support.

1.2 Concept

The Navy will field JSIMS for Navy use to support the Navy Training Continuum shown in Figure 1. Navy users will cover the continuum of training from platform level (Category I), to Joint Task Force Level (Category III), to strategic level. JSIMS will serve a wide range of training audiences and support training in tactical to strategic level warfare tasks. The concept for transition to JSIMS is to provide a system which more effectively and efficiently meets user requirements, deliver JSIMS to Navy and Joint users in a timely manner, and replace legacy M&S systems.

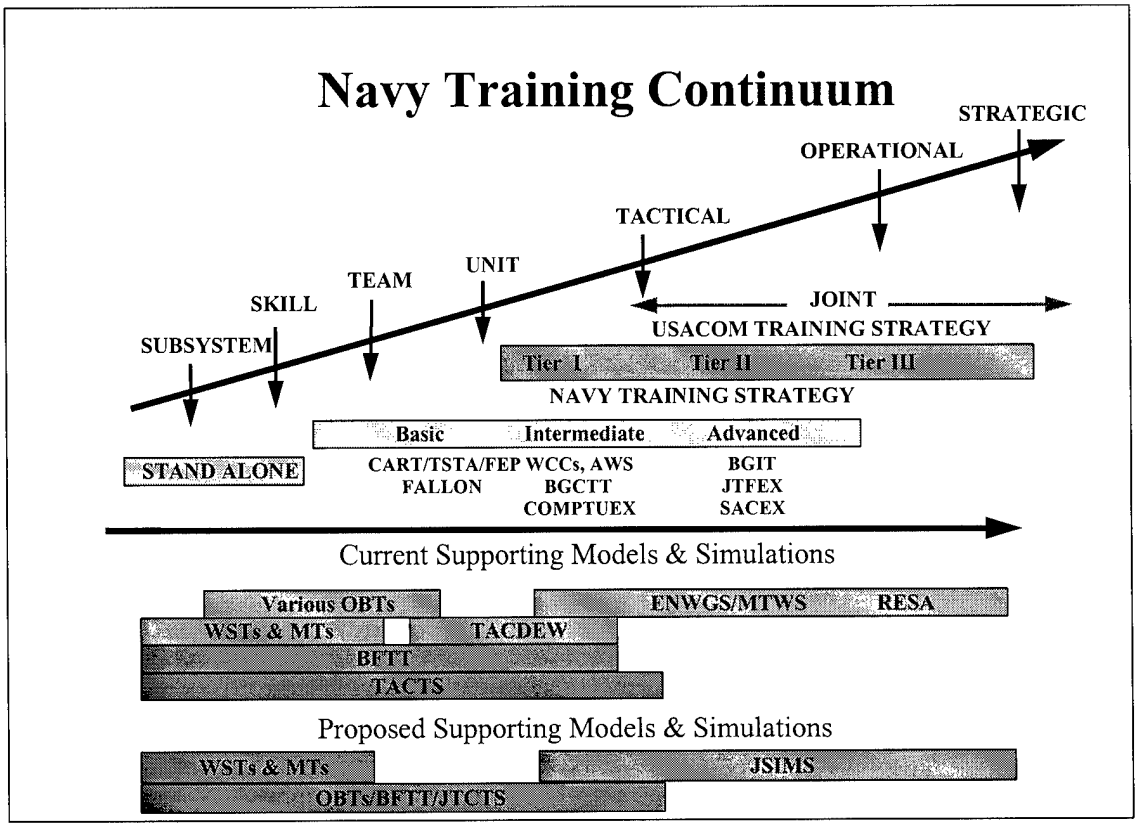

Figure 1 Navy Training Continuum

NAVY ANNEX GLOSSARY

AWS	Amphibious Warfare Seminar
BFTT	Battle Force Tactical Trainer
BGCTT	Battle Group Commander's Tactical Training
BGIT	Battle Group Inport Training
CART	Command Assessment of Readiness for Training
ENWGS	Enhanced Navy Wargaming System
FALLON	Fallon Nevada, Air Wing training
FEP	Final Evaluation Problem
JSIMS	Joint Simulation System
JTCTS	Joint Tactical Combat Training System.
JTFEX	Joint Task Force Exercise
MT	Mobile Trainers
OBT	On Board Trainer
RESA	Research, Evaluation and System Analysis Model
SACEX	Supporting Arms Coordination Exercise
TACDEW	Tactical Advanced Combat Direction and Electronic Warfare System
TACTS	Tactical Air Combat Training System
TSTA	Tailored Ship's Training Availability
WCC	Warfare Commander's Course
WST	Weapons System Trainer

1.3 JSIMS Maritime Program

The management structure of JSIMS is outlined in the JWFC's JSIMS Transition Plan. The following additions are provided to clarify responsibilities for fielding JSIMS for Navy use.

The JSIMS Maritime Integrated Development Team (IDT) has the responsibility to field JSIMS based on plans developed with the input of Navy users of JSIMS and approved by the JSIMS Maritime Executive Agent (EA). The Fleet Advocate under the direction of the System Engineer has the responsibility to coordinate JSIMS Maritime transition and fielding. He will exercise this responsibility through the Deployment Integrated Product Team (IPT), and in close coordination with the JSIMS Deployment and Training IPT.

JWFC is the JSIMS Program Advocate, the focal point for requirements, and the manager of JSIMS core funding. JWFC writes the transition plan for the five joint sites, manages their transition activities and chairs the JSIMS Configuration Control Board (CCB). The Maritime Executive Agent (EA) coordinates with JWFC, and is the resource sponsor for JSIMS Maritime Program funding. The JSIMS Maritime IDT oversees the Navy JSIMS Transition Plan, and manages transition activities for fielding JSIMS for Navy users.

12.0 TRANSITION PROCESS

2.1 Development Transition Phase

JSIMS Maritime will participate in the Development Transition phase, by fielding CINCLANTFLT and CINCPACFLT prototype sites at JSIMS Build 1. These sites will be available to participate in demonstrations and collaborative exercises, as well as the JSIMS IOC UE98-1 exercise with the USACOM JTASC.

2.2 Transition to FOC

The Fleet Advocate will work closely with the JSIMS Fleet Introduction Team (JFIT) and end users, training activities that will receive JSIMS, to plan for the receipt of JSIMS, procure and install necessary hardware and supporting software, provide training and initial on-site support, and conduct a JSIMS certification exercise. The JSIMS Transition Process is shown in figure 2 of the JSIMS Transition Plan. The Navy JSIMS Transition Process, described in more detail in section 4.3 compliments the joint process by extending it to Navy site fielding.

2.3 JSIMS Requirements Control Board/JSIMS Configuration Control Board

JSIMS Maritime is a member of the JSIMS Requirements Control Board (RCB) and the JSIMS Configuration Control Board (JCCB), and supports the Transition Review Process Cycle. The program will employ Request for Change (RFC) and Discrepancy Report (DR) procedures to identify new user requirements, changes and discrepancies that arise during Navy fielding of JSIMS for our users. JSIMS Maritime recognizes the need for, and supports, efficient and effective management of the transition process, and later model management through the JSIMS RCB chaired by JWFC.

23.0 NAVY TRAINING SYSTEM TRANSITION

3.1. Navy Training Roadmap

Figure 2 is the Navy roadmap which shows Navy transition to JSIMS or achieve the necessary level of interoperability with JSIMS. The goal is to provide common components, scenario generation and

control, models, displays, reconstruction and debrief, to support users across the entire Navy Training Continuum.

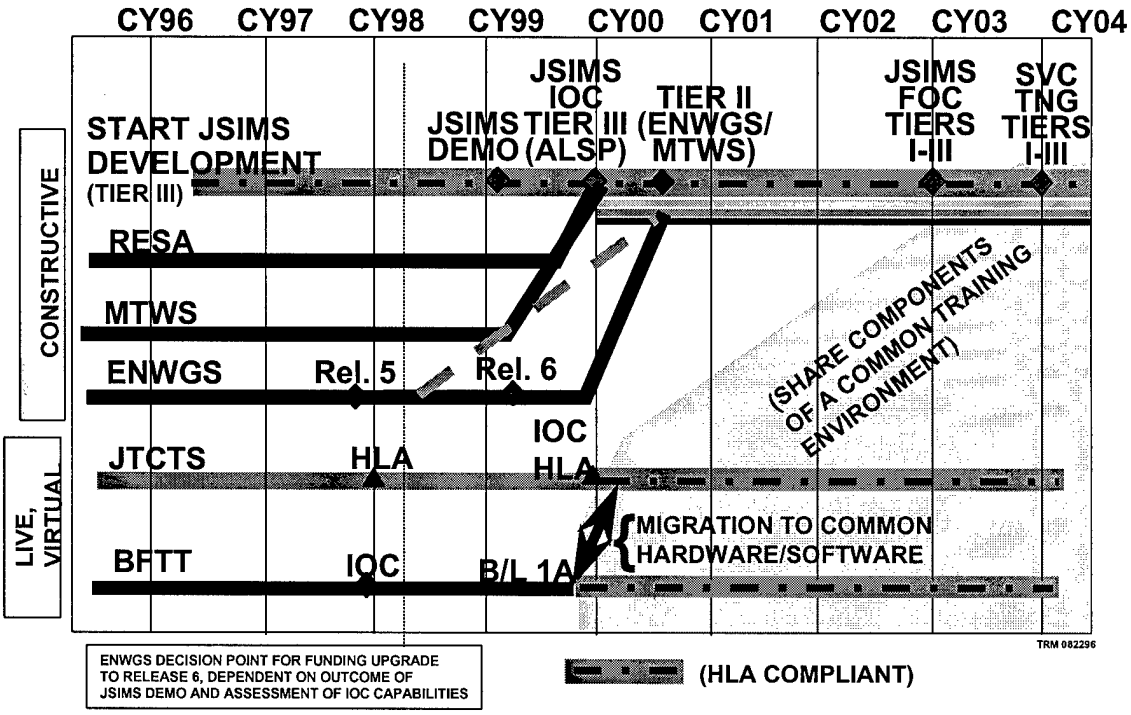

Figure 2 Navy Training Roadmap

3.2 Broad Objectives

The broad objectives of the Navy Transition Plan are to:

- Replace RESA in the JTC beginning at IOC, and on the timeline of the JSIMS Transition plan at other joint simulation centers.
- Replace ENWGS at the Tactical Training Groups Atlantic and Pacific, the Expeditionary Warfare Training Groups Atlantic and Pacific, and Naval War College, and field JSIMS to support other Navy Applications.
- Provide JSIMS interoperability with the Battle Force Tactical Training System (BFTT) and the Naval Aviation Tier 1 tactical training systems for Tier I Training. Capabilities of these systems will be integrated with JSIMS allowing common models and a common training environment to be used across the continuum of training from platform level (Category I) to Joint Task Force level (Category III).

04.0 NAVY TRANSITION PLAN

4.1 Navy Sites

Figure 3 provides a high level view of Navy sites, their location and the architecture for fielding JSIMS for Navy users.

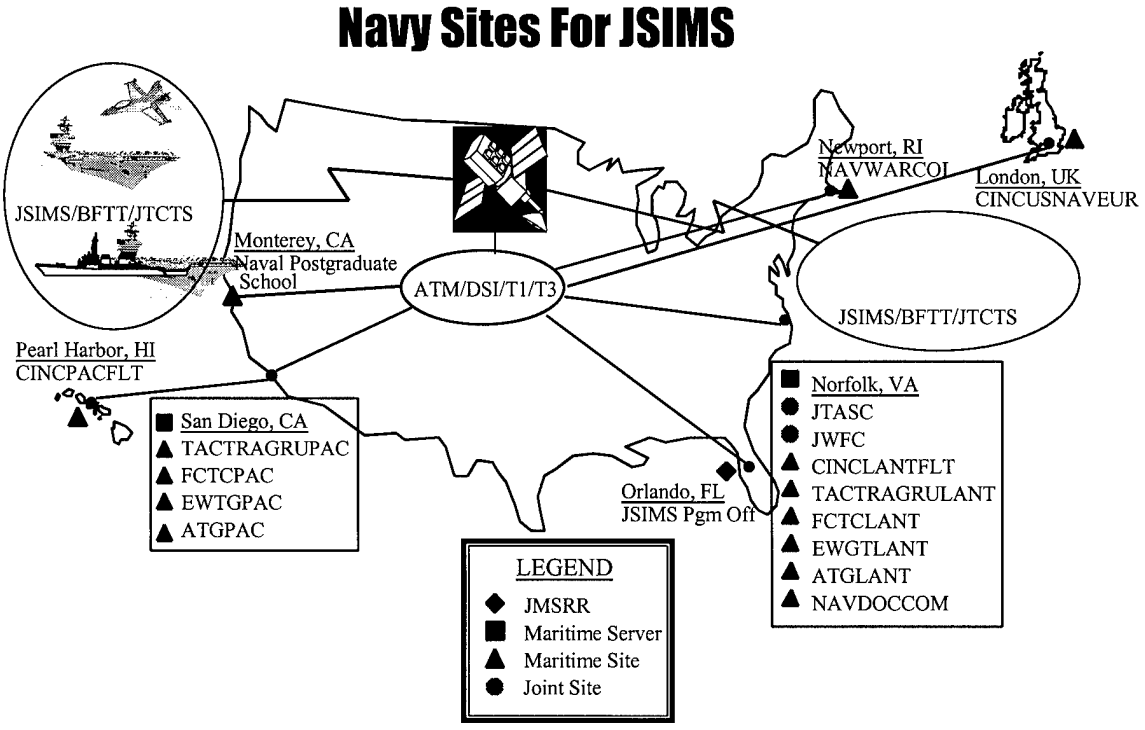

Figure 3 Navy Sites for JSIMS

4.2 Transition Plan Assumptions

The following set of assumptions will be used to develop and execute the transition plan.

- Training and readiness cannot be sacrificed to support transition activities.
- Navy JSIMS User sites will provide the necessary support facilities and operational concept necessary for transition. Building on existing and planned infrastructure at each site, and leveraging the Navy Information Technology 21 (IT 21) initiative, JSIMS Maritime will provide workstations, servers, data management and peripheral equipment. Sufficient network communication infrastructure will be provided to set up the site and connect to wide area networks and other communication means required for JSIMS.
- JSIMS Maritime will establish a CINCLANTFLT JSIMS prototype site at Tactical Training Group, Atlantic in Norfolk, and a CINCPACFLT JSIMS prototype site at Expeditionary Warfare Training Group, Pacific in San Diego, California with JSIMS Build 1. These sites will be available to participate in demonstrations and collaborative exercises, as well as the JSIMS IOC UE 98-1 exercise.
- RESA will be phased out in consonance with the JTC transition timeline, and JSIMS deployment to the three JTC sites (JTASC, WPC and KBSC).
- ENWGS will be phased out at the Tactical Training Groups Atlantic and Pacific, and the Expeditionary Warfare Training Groups Atlantic and Pacific with JSIMS Version 1.1 and JSIMS Site Certification at those locations.
- ENWGS will be phased out at the Naval War College in conjunction with fielding JSIMS to the National Defense University and the Naval War College, and JSIMS Site Certification at those locations.

- A JSIMS/BFTT/JTCTS Interoperability study is ongoing to determine the approach and plan to achieve interoperability between these systems to support the JSIMS Maritime Concept of Operations. System deployment and site considerations resulting from this study will be identified by 31 December 1997.

4.3 Site Transition

Figure 4 provides the transition plan template for each Navy JSIMS site. It is closely integrated with the systems engineering and support engineering processes used to develop and deploy the system.

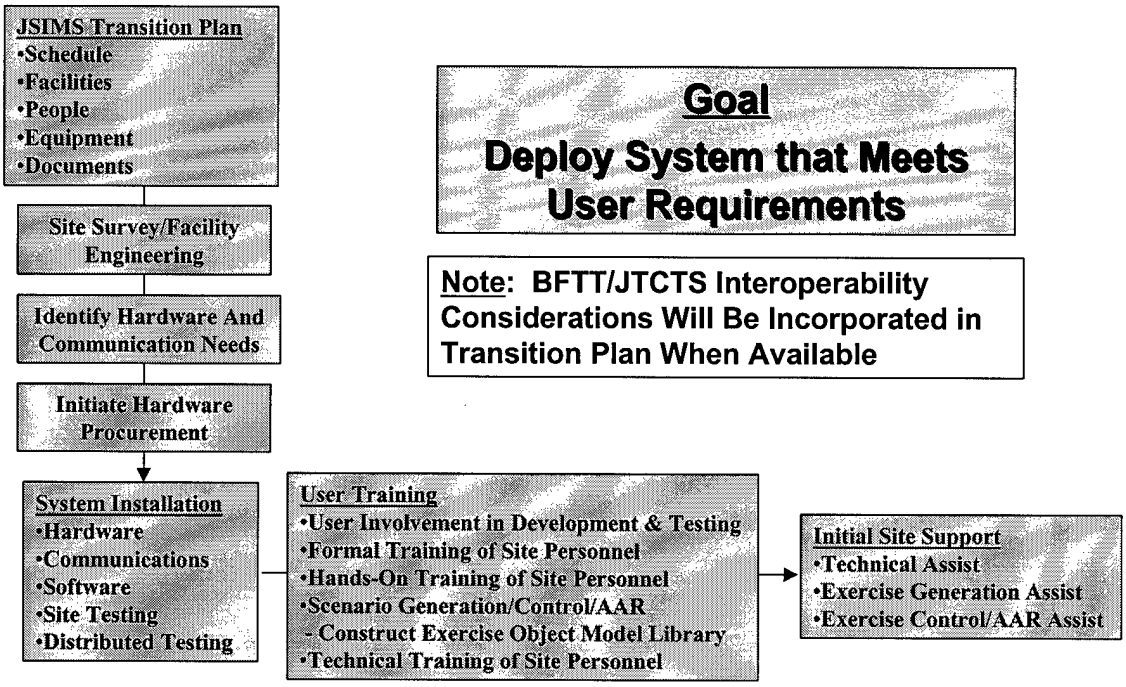

Figure 4 Site Transition Template

Table 1 delineates the proposed initial JSIMS exercises at Navy sites and in support of Joint sites, and the date the site will be fielded for use.

Site	Exercise	Date
TACTRAGRULANT Prototype with JTASC	Unified Endeavor 00-1	Dec 1999
EWTGPAC Prototype with JTASC	Unified Endeavor 00-1	Dec 1999
TACTRAGRUPAC	TBD BGARGIT/JTFEX	Jul 2000
EWTGLANT	TBD BGARGIT/JTFEX	Mar 2000
Naval War College with NDU	TBD Wargame	Mar 2001
CINCLANTFLT	TBD COMPTUEX/JTFEX/Tier III	Jul 2000
CINCPACFLT	TBD COMPTUEX/JTFEX/Tier III	Oct 2000
Fleet Combat Training Center, Atlantic	TBD COMPTUEX/JTFE X/Tier III	Jul 2000
Fleet Combat Training Center, Pacific	TBD COMPTUEX/JTFEX/Tier III	Oct 2000
Naval Doctrine Command	TBD Wargame	Aug 2001
Afloat Training Group, Atlantic	TBD TSTA/FEP Exercise	Mar 2001

Afloat Training Group, Pacific	TBD TSTA/FEP Exercise	Apr 2001
CINCUSNAVEUR with WPC	Trail Blazer	Oct 2000
COMSEVENTHFLT Western Pacific with KBSC	Yama Sakura	Jan 2001
Naval Postgraduate School	TBD Wargame	Aug 2001

Table 1 Navy Site Transition Schedule

4.4 Role Considerations by Site

JSIMS Maritime will work with the JSIMS Enterprise to leverage Joint and other service efforts to rapidly, effectively and efficiently transition Navy users to JSIMS. Users will be fully integrated into the process to develop and deploy JSIMS for Navy use in order to provide early and continuous feedback to ensure JSIMS will meet user requirements.

4.4.1 Prototype Sites

Prototype sites to be established at Tactical Training Group, Atlantic for CINCLANTFLT, and Expeditionary Warfare Training Group, Pacific for CINCPACFLT will allow these activities and future Navy JSIMS users at these areas of Fleet concentration to participate in the development and fielding of JSIMS for Navy use. The prototypes will enable involvement in the demonstrations and collaborative exercises accompanying each JSIMS build, provide rapid feedback of lessons learned, and support development of the Navy architecture for expeditiously fielding JSIMS for Navy use. JSIMS Maritime will work with USACOM, and the JWFC to certify the sites in Unified Endeavor 00-1.

4.4.2 Tactical Training Groups and Expeditionary Warfare Training Groups

Tactical Training Groups (TTGs). The Tactical Training Groups Atlantic and Pacific will employ JSIMS as a replacement for ENWGS in the traditional wargaming context. It will provide classroom curriculum support, as well as electronically exportable battle group level tactical training to staffs and individual units both inport and underway. Training may be conducted within a wargaming facility, aboard units inport, aboard units at sea, or a combination of the three. The TTGs will provide intermediate and advanced level training to all commanders, staff and commanding officers enroute to their assignments and within the inter-deployment training cycle. Curriculum focus includes joint and combined maritime warfare in open ocean and littoral expeditionary warfare environments. The TACTRAGRUPAC site will be certified in a BGARGIT/JTFEX exercise TBD.

Expeditionary Warfare Training Groups (EWTGs). EWTGs Atlantic and Pacific will employ JSIMS in a traditional wargaming context and also as classroom curriculum support to reinforce command/battlegroup staff decision-maker training for ARG/ MEU force employment in support of the Tactical Training Strategy. They will provide advance and intermediate level training in joint, combined, littoral, and open ocean operations at the theater level and below. The EWTLANT site will be certified in a BGARGIT/JTFEX exercise TBD.

4.4.3 CINCLANTFLT/CINCPACFLT

The CINCLANTFLT/CINCPACFLT sites will primarily support category III (JTF) and category II (JTFEX) training. At the category III level, JSIMS will provide the capability to simulate forces in support of Joint Task Force and Combined Arms training currently provided by the Joint Training Confederation (JTC). JSIMS will be used to represent Navy functions in support of training of U.S. and Allied Naval officers in JTF and Combined Arms command and Control exercises. The principal Navy personnel who will be trained are Navy Component Commanders and their staffs, and Naval Officers and their staffs assigned as JTF commanders. Because of the importance of C4ISR at these levels, there is a need for the capability to incorporate play at the SCI classification level at these sites to participate in category III component and JTF level training, and category II JTFEXs.

As the principal agents for the Fleet commanders, Commander Second Fleet and Commander Third Fleet are responsible for carrying out the Fleet's training and readiness requirements. They have a need to perform overall training program management, exercise planning and control of a wide range of events across the Navy Training Continuum. To support the numbered Fleet commanders, these capabilities should be available at the CINCLANT and CINCPACFLT sites. Fleet CINCs will work closely with the TTGs, EWTGs and FCTCs in controlling tactical training to staffs and units both inport and underway.

The numbered fleet Flagships, USS MOUNT WHITNEY and USS CORONADO, will also need some of these capabilities. There is a requirement for a small footprint aboard the Flagships, and for installations closely aligned with C4ISR systems.

In addition to supporting Joint and Navy training programs as its first priority, JSIMS will support other Navy applications including operational planning and rehearsals. The JSIMS simulation environment is closely linked to C4I systems to support these applications. Installations aboard the Flagships should support these capabilities. The CINCLANTFLT/ CINCPACFLT sites will be certified in a COMPTUEX/JTFEX exercise TBD, and may be certified with the FCTC sites.

4.4.4 Fleet Combat Training Centers

The Fleet Combat Training Centers (FCTCs) will use JSIMS to support the execution of the Tactical Training Strategy, and conduct formal schoolhouse courses of instruction. They will support Intermediate and Advance Phase in-port training for Task Force (CVBG/ARG) teams from key decision-makers to individual console operators. JSIMS will also be used to support Fleet and Task Force exercises afloat. The FCTC sites will be certified in COMPTUEX/JTFEX exercises TBD. Because of their linkages, the FCTC sites may be certified with the CINCLANTFLT/CINCPACFLT sites.

4.4.5 Naval War College

JSIMS will replace ENWGS as the principal warfare education and analysis support tool at the Naval War College (NWC), in Newport, RI It will provide a variety of wargaming based services, including wargames conducted by the Center for Naval Warfare Studies, the examination of Naval operational concepts be the Strategic Studies Group, and the education of Command and Staff students at the NWC. Because of similarity in mission and educational methods, the most effective way for the Navy to transition and conduct site certification for NWC is to work closely and participate in site certification with the National Defense University (NDU). JSIMS Maritime will establish liaison and coordinate with NDU and JWFC to accomplish this.

4.4.6 Naval Doctrine Command

JSIMS will be the primary tool used by the Naval Doctrine Command (NDC) for meeting its responsibilities for concept and doctrine development. It will be used to evaluate current doctrine as well as evolving concepts and doctrine. NDC will be site certified using a wargame TBD.

4.4.7 Afloat Training Groups

The Afloat Training Groups (ATGs) will use JSIMS in concert with other embedded and Mobile Combat Systems Training devices to provide platform level training during the basic phase of the Tactical Training Strategy. The training will occur on board ships in-port and at-sea. ATG sites will be certified using Tailored Ship Training Availability (TSTA) and Final Evaluation Problem (FEP) events TBD.

4.4.8 CINCUSNAVEUR with WPC/COMSEVENTHFLT (WESTPAC) with KBSC

CINCUSNAVEUR with WPC. Commander, U.S. Naval Forces, Europe (CINCUSNAVEUR) has the responsibility for the training and readiness of the SIXTH Fleet and other assigned Naval forces. USS LASALLE is assigned as Flagship for the Commander, SIXTH Fleet. CINCUSNAVEUR is also dual hatted as the Commander, Allied Forces Southern Europe (CINCSOUTH). In this capacity, he has the responsibility to train his headquarters in Naples, Italy, his components in the Southern region, and to participate in events throughout the European Theater. This requires the simulation and data, voice and video systems along with exercise control and network control to plan and conduct exercises. Currently, Warrior Preparation Center (WPC) provides JTC and JTLS support for a number of these wargaming efforts.

The most effective way for the Navy to provide JSIMS capability for CINCUSNAVEUR is to coordinate with WPC for system support and to provide training program management, exercise planning and control capabilities to CINCUSNAVEUR. These capabilities would also be provided for the Flagship LASALLE in support of COMSIXTHFLT. As JSIMS matures, these capabilities will support operational planning and rehearsals.

JSIMS Maritime will work closely with WPC to develop a plan for system support and to participate in WPC site certification. JSIMS Maritime will coordinate with the WPC and JWFC to accomplish this.

COMSEVENTHFLT (Western Pacific) with KBSC. Commander, Seventh Fleet (COMSEVENTHFLT) has responsibilities in the Western Pacific similar to those of COMSIXTHFLT in the European Theater. RESA and the JTC are currently used at the Korean Battle Simulation Center (KBSC) to support a number of Navy, Joint and Allied CAX exercises in this area of operations. COMSEVENTHFLT will also use JSIMS for collaborative planning, exercise planning and control, operational planning and rehearsals. These capabilities would be provided for the Flagship BLUE RIDGE in support of COMSEVENTHFLT. As in the European Theater, the most effective way for the Navy to meet its responsibilities is to work with the KBSC for system support, and to participate with the KBSC in site certification. JSIMS Maritime will coordinate with the KBSC and JWFC to accomplish this.

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